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ARIZONA CORPORATION COMMISSION
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Docket #(s): W-02113A-13-0118

Arizona Corporation Commission

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Exhibit #: Part 4 of 5

R1-R16, R18, R20 19

BEFORE THE ARIZONA CORPORATION CO

COMMISSIONERS

KRISTIN K. MAYES, Chairman
GARY PIERCE
PAUL NEWMAN
SANDRA D. KENNEDY
BOB STUMP

Arizona Corporation Commission

DOCKETED

AUG 25 2010

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NR



IN THE MATTER OF THE APPLICATION OF
ARIZONA WATER COMPANY, AN ARIZONA
CORPORATION, FOR A DETERMINATION OF
THE FAIR VALUE OF ITS UTILITY PLANT AND
PROPERTY, AND FOR ADJUSTMENTS TO ITS
RATES AND CHARGES FOR UTILITY SERVICE
AND FOR CERTAIN RELATED APPROVALS
BASED THEREON.

DOCKET NO. W-01445A-08-0440

DECISION NO. 71845

OPINION AND ORDER

DATES OF HEARING:

August 28, (Pre-Hearing Conference); August 31,
September 1, 2, 3, 4, 8, 9, 10, and 11, 2009

PLACE OF HEARING:

Phoenix, Arizona

ADMINISTRATIVE LAW JUDGE:

Dwight D. Nodes

APPEARANCES:

Mr. Norman D. James and Mr. Jay L. Shapiro,
FENNEMORE CRAIG, on behalf of Arizona Water
Company;

Ms. Michele L. Van Quathem, RYLEY, CARLOCK &
APPLEWHITE, on behalf of Abbott Laboratories;

Mr. Nicholas J. Enoch, LUBIN & ENOCH, PC, on
behalf of IBEW Local 387;

Ms. Michelle Wood, on behalf of the Residential Utility
Consumer Office; and

Mr. Wesley Van Cleve and Ms. Ayesha Vohra, Staff
Attorneys, Legal Division, on behalf of the Utilities
Division of the Arizona Corporation Commission.

1 denied.

2 **4. Conclusion**

3 We agree with Staff and RUCO that the requested adjustment mechanisms should be denied.
4 In the Company's two prior rate applications, we considered virtually the same arguments as were
5 presented in this case, and declined to allow AWC's proposed adjustment mechanisms. We see no
6 valid reason to depart from the rationale set forth in those decisions, for the reasons clearly delineated
7 in Staff's testimony. As was stated in Decision No. 68302, at pages 45-46:

8 There is a danger of piecemeal regulation inherent in adjustment
9 mechanisms. Because they allow automatic increases in rates without a
10 simultaneous review of the utility's unrelated costs, adjustment
11 mechanisms have a built-in potential of allowing a utility to increase rates
12 based on certain isolated costs when its other costs are declining, or when
13 overall revenues are increasing faster than costs due to customer growth.
14 Adjustment mechanisms should therefore be used only in extraordinary
15 circumstances to mitigate the effect of uncontrollable price volatility or
16 uncertainty in the marketplace.

17 Notwithstanding Mr. Garfield's claims to the contrary, we do not believe that the expenses for
18 which AWC seeks adjustment mechanisms are of sufficient magnitude to warrant extraordinary
19 ratemaking treatment. Nor is there such extreme volatility for AWC's purchased power, water, or
20 fuel costs to justify approval of adjusters for what are essentially normal business expenses for a
21 water utility. We are no more persuaded by the Company's AAM proposal, which apparently would
22 allow automatic rate increases whenever certain price and inflation factors change. Even if the record
23 contained adequate details to allow implementation, we would not be inclined to approve a
24 mechanism that would appear to be inconsistent with our constitutional obligation to set just and
25 reasonable rates, based on consideration of the interests of both the Company and its customers.
26 Considering all of the evidence presented on this issue, we will not adopt the propose adjustment
27 mechanisms.

28 **5. Northern Group Conservation Adjustment**

AWC also proposes a "conservation adjustment" to test year revenues for its Northern Group
to recognize the downward impact on revenues that the Company claims will be experienced by the
imposition of tiered rates for the systems in that Group. Currently, the Northern is the only one of

1 AWC's three Groups that does not have inverted tier rates. The Company's proposed adjustment
2 would increase revenues for the Northern Group systems by a combined amount of \$308,701. (Ex. A-
3 19, Sched. C-2.)

4 In support of its proposal, AWC witness Reiker presented a multiple regression analysis of
5 water consumption by residential customers in the Casa Grande System which shows residential
6 consumption would decline by 8.7 percent, after controlling for the effects of temperature and
7 precipitation. (Ex. A-18, at 18-19.) The Company asserts that the results are not surprising given that
8 the intent of imposing inverted tier rates is to encourage conservation. The Company criticizes Staff
9 for opposing AWC's proposal, claiming that Staff's opposition is not supported by evidence and that
10 Staff fails to recognize the revenue losses that are likely to be experienced by the Company as the
11 result of inverted tier rates.

12 Staff argues that there is no dispute that the intent of inverted tier rates is to promote efficient
13 water use. However, Staff points out that AWC's other Groups have had inverted tier rates for years,
14 yet the Company has not proposed a similar adjustment prior to this case. Staff also contends that
15 most other private water companies have similar tiered rate structures. Mr. Igwe claimed that Staff is
16 not aware of any other cases in which the Commission has granted a "conservation adjustment"
17 where inverted tier rates have been approved. Staff asserts that the Company's proposal is
18 speculative and should be denied. (Ex. S-24, at 21-22.)

19 Although AWC seeks to deny that its proposed adjustment is similar to a decoupling
20 mechanism (AWC Reply Brief, at 58), its own witness conceded that it is "a form of decoupling."
21 (Tr. 565-67.) In effect, the Company is asking the Commission to accept an analysis conducted on
22 one of its systems and extrapolate an amount of revenue, to the dollar, based on an assumption of
23 future customer behavior. Aside from the imprecision inherent in such a calculation, we do not
24 believe that it is appropriate at this time to entertain the type of proposal advanced by AWC in this
25 proceeding. In prior gas company cases, we have declined to accept decoupling proposals.¹² We
26 have, however, opened generic dockets to consider gas and electric decoupling mechanisms,¹³ and we

27 ¹² *Southwest Gas Corp.*, Decision No. 70665 (December 24, 2008), at 34-42; *Southwest Gas Corp.*, Decision No. 68487
28 (February 23, 2006), at 31-34.

¹³ See, Docket Nos. E-00000J-08-0314 and G-00000C-08-0314.

1 reserve judgment as to whether decoupling methodologies would be appropriate with respect to
 2 conservation-related declining water company revenues. We therefore decline to adopt AWC's
 3 proposed adjustment in this case.

4 While we decline to adopt AWC's proposal in this case, we believe it is appropriate for the
 5 Commission to consider what measures may be needed to incentivize conservation at regulated water
 6 utilities. The Commission has opened a generic docket and conducted workshops to consider this
 7 issue for electrical and natural gas utilities and believes similar efforts are appropriate for water
 8 utilities. The Commission shall open a generic docket to further examine the issues raised in this
 9 proceeding by AWC's conservation adjustment proposal and more broadly examine disincentives to
 10 promotion of conservation at Arizona's water utilities and methods to mitigate these disincentives.

11 **B. Engineering Issues**

12 As part of its investigation of rate applications, the Commission's Engineering Staff prepares
 13 an Engineering Report that addresses a description and analysis of each water system; water usage on
 14 each system; system growth; compliance with ADEQ and ADWR requirements; depreciation rates;
 15 and recommendations to the Commission. (Ex. S-13, at 2.) In this case, Staff witnesses Katrin
 16 Stukov and Brian Bozzo conducted Staff's investigation and analysis of AWC's systems, and Ms.
 17 Stukov prepared the Engineering Report. Staff reached the following conclusions:

- 18 1. ADEQ or, where applicable, the Maricopa County Environmental Services
 19 Department ("MCESD"), reported that AWC's community water systems
 20 have no deficiencies and are delivering water that meets water quality
 21 standards pursuant to the requirements of A.A.C. Title 18, Chapter 4;
- 22 2. 8 of the Company's community water systems have water loss rates above
 23 Staff's recommended threshold of 10 percent: Pinetop Lakes (15.4 percent);
 24 Pinewood (26 percent); Rimrock (11 percent); Superior (18.4 percent);
 25 Winkelman (12 percent); San Manuel (10.7 percent); Bisbee (16 percent); and
 26 Tierra Grande (12.6 percent);
- 27 3. All of AWC's water systems have adequate storage capacities to serve their
 28 respective customers, as well as a reasonable level of growth;
4. With the exception of Valley Vista, AWC's other water systems have
 adequate production capacity to serve existing customers and a reasonable
 level of growth;
5. With the exception of the Superior and Oracle systems, AWC's systems are in
 compliance with ADWR requirements governing community water systems.
 ADWR has determined that management plans filed by AWC for Superior
 and Oracle are not in compliance with potential lost and unaccounted for
 water;

6. The Forest Towne system is not a community water system subject to ADEQ and ADWR monitoring requirements; and

7. AWC has approved curtailment plan and backflow prevention tariffs.

Based on its analysis and the conclusions reached in the Engineering Report, Staff made the following recommendations regarding engineering issues that remain in dispute:

1. For the 8 community water systems that have water loss rates above 10 percent, AWC should be required to evaluate the systems and prepare a report for corrective measures demonstrating how it plans to reduce water losses to less than 10 percent, and the water losses should be reduced to less than 10 percent by no later than December 31, 2010. However, if AWC finds that reducing water loss for a given system to less than 10 percent is not cost-effective, the Company should submit a detailed cost analysis and explanation demonstrating why reductions to less than 10 percent are not cost effective. In no case, should system water loss be allowed to remain above 15 percent. AWC should be required to file the corrective measures or cost effectiveness report with Docket Control, as a compliance item in this docket, by June 30, 2011; and
2. AWC should be required to file by December 31, 2010, with Docket Control, as a compliance item in this docket, documentation from ADWR showing that the Superior and Oracle management plans are compliant with ADWR requirements.

(Ex. S-13, Eng. Report Summary.) The disputed issues related to the Engineering Report recommendations are discussed below.

1. Non-Account Water

a. Staff

Staff contends that 10 percent is the industry standard with respect to acceptable water losses on a system. Staff argues that despite AWC's claim of employing an aggressive, state-of-the-art leak detection program, 8 of its 22 community water systems remain above 10 percent, with 4 of the systems above 15 percent. Staff also asserts that the Company should have submitted an evaluation with its rate application to explain how it intends to bring all of its systems under a 10 percent loss ratio, or describe why it would not be feasible to do so.

Staff disputes AWC's contention that compliance with Staff's recommendation would cost approximately \$35 million. Staff claims that the Company's compliance estimate is based on faulty assumptions about the percentage of infrastructure that would need to be replaced in the non-compliant systems. Staff contends that AWC did not provide a detailed analysis of the costs of infrastructure replacement or a comprehensive water loss assessment to support its position. Staff

1 believes that preparation of plans to achieve incremental compliance with the sub-10 percent standard
2 is called for, rather than making an assumption that most or all of a system's infrastructure would
3 need to be replaced to meet Staff's recommendation. Ms. Stukov stated that AWC has not provided
4 sufficient information in this proceeding to alter Staff's recommendation. She offered suggestions
5 regarding the types of considerations that should be evaluated regarding water loss mitigation,
6 including: categorization of types of losses (e.g., leaks vs. unauthorized consumption); volume lost in
7 each category; where losses are occurring; why losses are occurring; proactive water loss reduction
8 plans; unit production costs of lost water and additional capacity costs; and short and long-term
9 detailed cost analyses of implementing water loss reduction plans, including benefits of water saved.
10 (Ex. S-14, at 4-5.)

11 Staff disagrees with AWC's assertion that filing the recommended water loss reports are
12 unreasonable or arbitrary, and would require extensive time that would detract from the Company's
13 efforts to reduce losses. (Ex. A-10, at 6.) Staff suggests that compilation and submission of a
14 comprehensive report should not be onerous for AWC because: the Company already tracks water
15 losses and creates monthly loss reports; the Company's operators monitor leaks and breaks on a daily
16 basis under its leak monitoring program; and AWC is well aware of system repairs, and tracks such
17 repairs.

18 According to Staff, AWC also insists that a distribution system improvement charge ("DSIC")
19 mechanism¹⁴ should be implemented if the Company is ordered to comply with Staff's water loss
20 remediation recommendations. Staff indicates that although a DSIC mechanism may be appropriate
21 to consider as a means of addressing the costs for mitigating water losses, the Company did not offer
22 a specific plan in this case that would enable Staff to alter its current recommendation.

23 **b. AWC**

24 In response to Staff's water loss recommendations, AWC argues that Staff failed to take into
25 account the costs associated with compliance. The Company claims that Staff improperly attempts to
26 shift the burden to explain why some systems have non-account water above 10 percent; what the

27 ¹⁴ As described by Company witness Harris, a DSIC is a charge on monthly customer bills that provides capital for
28 infrastructure replacement needs. Mr. Harris indicated that eight states, all in the northeast and midwest areas of the
United States, currently have DSICs in place to fund replacement of aging infrastructure. (Ex. A-10, at 5-6.)

1 Company has done to address the issue; why the 10 percent loss rate has not been achieved for all
2 systems; and what actions will be taken to meet Staff's 10 percent standard. AWC asserts that Staff
3 did not meet its burden of proof "to demonstrate that its conclusions are based on competent and
4 substantial evidence, and to show that its recommendations, if adopted, would further the public
5 interest." (AWC Reply Brief, at 63.) According to AWC, the record demonstrates that: it has not
6 ignored the non-account water issue and the Company has explained that it has a comprehensive
7 water loss management program; prior loss reduction efforts have been successful; the Company
8 agreed to share its information with Staff; non-account water in a few systems cannot be reduced
9 further without costly capital improvements, and why improvements are not justifiable or prudent;
10 and cost recovery must be addressed before major system improvements could be undertaken.

11 The Company disagrees with Staff that 10 percent is the "industry standard" for water losses.
12 AWC witnesses Harris and Schneider conceded that in prior cases, Staff has advocated, and the
13 Commission has adopted, a 10 percent threshold for imposing remedial actions by water utilities. (Tr.
14 278-79; 348.) Mr. Schneider testified that the "AWWA uses more of a system efficiency [standard]"
15 in water loss evaluations. (*Id.* at 348.) The Company argues therefore that 10 percent is not the
16 industry standard, "nor should it be the Commission's standard." (AWC Reply Brief, at 66.) AWC
17 suggests that the non-account water of a specific system should be evaluated based on the system's
18 age, location, topography, plant configuration, system pressure, and local weather, among other
19 factors. (Ex. A-10, at 12-15.)

20 AWC also points to the success it has achieved in reducing non-account water since the test
21 year. According to Mr. Schneider's testimony, non-account water was reduced in Pinewood from 26
22 percent during the test year to 22.6 percent as of May 2009; losses on the Superior system were
23 reduced from 18.6 percent to 10.7 percent as of May 2009; and San Manuel losses were reduced from
24 10.7 to 10.2 percent. (*Id.* at 15-20.) The Company claims that its efforts have been successful despite
25 difficult system configurations, soil conditions and presence of aging infrastructure in certain
26 systems. AWC argues that all factors must be considered in considering the reasons for individual
27 system losses, and Staff's "one size fits all" approach is unreasonable. According to the Company,
28 despite its substantial and ongoing efforts to reduce system losses, some systems present specific

1 challenges that make reductions to Staff's recommended levels very difficult, cost prohibitive, or
2 both.

3 With respect to the costs that would be incurred to comply with Staff's recommendations,
4 AWC asserts that aging infrastructure of some systems (e.g., Bisbee), adverse soil conditions, and
5 unusually thick roads, make water main replacement the only viable option for additional leak
6 reduction efforts. The Company states that a massive main replacement effort would be extremely
7 costly, and in addition to an inability by AWC to obtain debt funding, there would likely be
8 substantial opposition by customers to such costly projects. In the event the Commission agrees that
9 water losses should be reduced to the levels contained in Staff's recommendations, the Company
10 claims that the Commission should provide a funding mechanism, such as a DSIC, to allow the
11 undertaking of the necessary infrastructure repairs.

12 Finally, AWC suggests that there is no evidence that all of the reporting requirements
13 contained in Staff's recommendation would have any beneficial impact on the Company's non-
14 account water. The Company argues that, aside from the resource constraints faced by AWC, as well
15 as Staff and the Commission, the evidence in the record of this case shows that further loss reductions
16 on certain systems would be cost prohibitive and would not be prudent. AWC asserts that it intends
17 to continue to monitor water losses aggressively for all of its systems, and it has offered to share the
18 data it collects with Staff. However, the Company opposes being required to "produce a bunch of
19 information in a format different than that already provided by the Company in its administration of a
20 comprehensive non-account water management program that is already working to the greatest extent
21 possible." (AWC Reply Brief, at 71.)

22 **c. Conclusion**

23 We agree with Staff that the non-account water standards adopted in a number of prior cases
24 is an appropriate measurement of water losses that may be deemed acceptable or unacceptable.
25 Although AWC claims not to accept Staff's guidelines as the industry standard, the Company's
26 witness offered only a vague reference to the AWWA considering such matters on a case-by-case
27 basis. We believe the standard proposed by Staff, that AWC would be required reduce its water loss
28 rates for each of its systems to no more than 10 percent, or submit a detailed cost analysis and

1 explanation demonstrating why a reduction to less than 10 percent is not cost-effective, is reasonable
2 and reflects an ability and intent to allow for the type of individual evaluation suggested by the
3 Company, considering the facts and circumstances faced by systems that are unable to meet the 10
4 percent standard.

5 The other part of the equation is whether 15 percent is an absolute upper limit on water loss
6 ratios under any and all circumstances. Although we have agreed with Staff in the past on that issue,
7 and continue to believe 15 percent system losses are excessive, there may be some rare and unusual
8 circumstances where reduction efforts could be cost-prohibitive. However, an argument in support of
9 maintaining ongoing system losses above 15 percent would be subject to substantial scrutiny, and the
10 proponent of such a position would bear an extremely high burden to show why losses could not be
11 reduced below that level. In this case, AWC claims that, for certain of its systems, achieving water
12 loss rates below 15 percent would be cost prohibitive. Without a detailed analysis of the costs and
13 benefits, we are unable to determine if the Company's assertions are accurate. However, AWC will
14 have the opportunity to persuade Staff and the Commission through the submission of documentation
15 in support of its argument.

16 One of the Company's arguments is that the reporting requirements recommended by Staff
17 are excessive and burdensome, and that Staff should simply accept the data retained by the Company
18 in its current form. It is not clear from the record whether Staff has, to this point, reviewed the
19 records kept by the Company regarding water loss, and whether that data is in a form acceptable to
20 Staff. However, if AWC has already undertaken the type of analysis it claims was adequate to
21 determine the cost prohibitive nature of compliance, including a detailed cost estimate of reducing
22 losses to within Staff's recommended guidelines, providing adequate documentation should not be
23 overly burdensome. In any event, we agree with Staff that detailed supporting documentation is
24 necessary to evaluate the costs and benefits for each of the systems to achieve water loss ratios
25 consistent with the standards we adopt in this Decision.

26 With respect to AWC's suggestion that the Commission must grant an adjustment mechanism
27 for infrastructure improvements, we do not believe the record supports the adoption of such a
28 mechanism at this time. The idea of a DSIC-type surcharge was raised during the course of the

1 proceeding, but no specifics of how such a mechanism would work were presented by the Company
2 and we have no basis in the record upon which to structure a DSIC surcharge. Moreover, it is not
3 clear that a DSIC would be appropriate for AWC which, on a system-wide basis, has infrastructure
4 that is substantially newer than the companies for which DSICs have been approved by regulatory
5 commissions in northeast and midwest states. While an infrastructure funding mechanism may be
6 reasonable for certain of AWC's aging systems, or for systems that face other unique challenges, we
7 make no finding, at this time, on those issues.

8 The record reflects that AWC has made progress in the monitoring of leaks and reduction of
9 non-account water for various troubled systems, and the Company is commended for those efforts.
10 However, given that water is such a valuable commodity in Arizona, particularly in some of the areas
11 in which AWC operates, we believe Staff's recommendations represent a reasonable and measured
12 balancing of the competing goals of ensuring that scarce resources are protected with the need to
13 keep utility rates as low as possible. Therefore, with a slight modification, we will adopt Staff's
14 recommendation.

15 While we decline to adopt a DSIC mechanism in this case, we believe it is appropriate for the
16 Company to further develop this issue for future Commission consideration. The Company should
17 prepare a study on a DSIC mechanism designed to implement leak detection devices and make
18 conservation based repairs to infrastructure. The study should further detail costs, rate impacts and
19 consider how to balance costs and benefits for customers.

20 In accordance with Staff's recommendation, as modified, AWC should reduce the non-
21 account water for each of its systems to less than 10 percent by July 1, 2011. For those systems that
22 have not achieved a water loss rate of less than 10 percent by July 1, 2011, AWC should be required
23 to evaluate the systems and prepare a report demonstrating how the Company plans to reduce water
24 losses to less than 10 percent. If the Company contends that reducing water losses to less than 10
25 percent is not cost effective, it should submit a detailed cost analysis and explanation demonstrating
26 why the water loss reduction to less than 10 percent is not cost effective. Absent extraordinary
27 circumstances, and with compelling supporting documentation, no system should be permitted to
28 maintain non-account water above 15 percent. The water loss report should be filed with Docket

1 Control, as a compliance item, by no later than December 31, 2011.

2 **2. ADWR Compliance**

3 As discussed above, at the time of the hearing, and through briefing, AWC's Superior and
4 Oracle systems were not in compliance with ADWR lost and unaccounted for water requirements.
5 Staff recommends that the Company be required to meet ADWR requirements for those systems.
6 According to the Company's witness, AWC was required to submit additional best management
7 practices ("BMPs") in order "to demonstrate to DWR that we are making progress in reducing the
8 water loss in those systems." (Tr. 426-27.) Mr. Schneider stated that the required information was
9 submitted to ADWR and the Company was waiting for a subsequent report regarding its compliance.
10 He testified that the non-compliant status did not present any health or safety issues for customers.
11 (*Id.*) The ADWR reports attached to his testimony indicate that ADWR "anticipates a complete and
12 satisfactory resolution regarding this matter in the near future." (Ex. A-10, FKS-RB-1 and FKS-RB-2.)

13 In accordance with Staff's recommendation, AWC should file by December 31, 2010, with
14 Docket Control, as a compliance item in this docket, documentation from ADWR indicating that the
15 Company's Superior and Oracle management plans are in compliance with ADWR requirements.

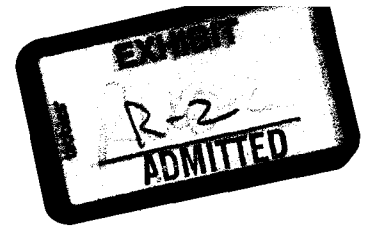
16 **C. Best Management Practices**

17 During the course of the hearing, through questions posed to Mr. Garfield, Chairman Mayes
18 raised the issue of imposing additional BMPs requirements on the Company, and whether a surcharge
19 or other funding mechanism would be appropriate. (Tr. 828-38.) Mr. Olea testified that although
20 Staff was not recommending imposition of additional BMPs above the ADWR requirements, Staff
21 would not oppose requiring additional BMPs or some type of funding mechanism, if the chosen
22 BMPs were appropriate for the system on which they were implemented. (Tr. 1060-63.)

23 In its brief, AWC explained that BMPs refer to conservation measures that must be adopted
24 by large municipal water providers, pursuant to a 2007 amendment to A.R.S. §45-566.01. (AWC
25 Initial Brief, at 104-105.) According to the Company, under the amended statute, municipal
26 providers, as well as AWC, are required to implement an education program, a metering program,
27 and one or more additional BMPs selected from an ADWR list. The Company claims that six of its
28 systems are subject to the requirements: Casa Grande, Apache Junction, Coolidge, White Tank,

COMPANY:
DOCKET NO:

CHAPARRAL CITY WATER COMPANY
W-02113A-13-0118



Response provided by: Sheryl L. Hubbard
Title: Manager, Rates & Regulation

Address: 2355 W. Pinnacle Peak Road, Suite 300
Phoenix, AZ 85027

Company Response Number: STF 4.2

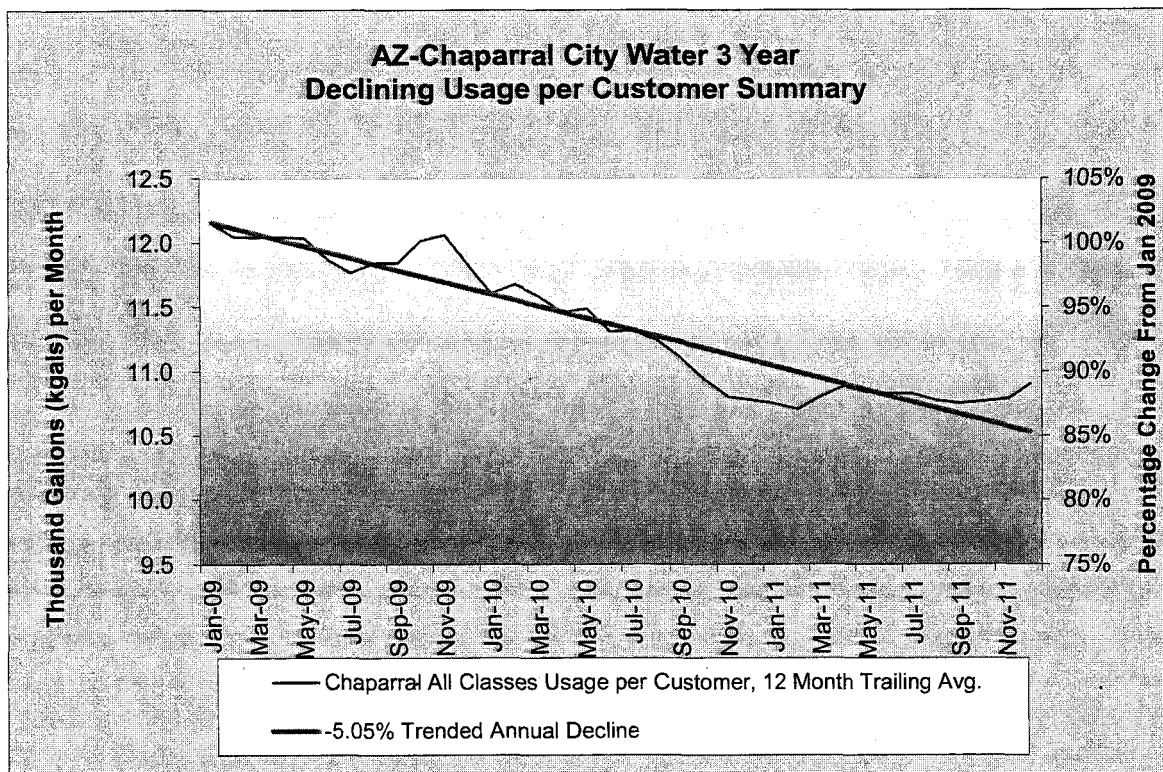
Q: Declining Usage Adjustment - Please provide the bill determinants by rate class, by month for the period beginning immediately after the end of the test year through July 31, 2013. Please summarize the activity akin to the information provided on company schedules H-1 and H-2 as provided in the rate application i.e., revenues, number of bills, average usages, etc.

A: Pursuant to a follow-up conversation with Ms. Rimback, the actual customer statistics (revenue, consumption, customers by rate class) are attached and labeled "STF 4.2 Declining Use.xlsx".

Also attached are billing data for the period January thru July, 2013 which could be used to prepare schedules H-1 and H-2 if desired. The Company has not prepared these schedules for the period after the end of the test year through July 31, 2013 and this would be a very time-intensive process. The billing data is labeled as follows:

STF 4.2 Declining Use (Jan_July_Part1).xlsx
STF 4.2 Declining Use (Jan_July_Part2).xlsx
STF 4.2 Declining Use (Jan_July_Part3).xlsx
STF 4.2 Declining Use (Jan_July_Part4).xlsx

Chaparral City Water District
Declining Usage Trend



Chaparral City Water Company

Customer Count

| 2013 - Actual | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | AVG |
|--------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|-----|-----|-----|-----|-----|--------|
| 01-Residential | 12,648 | 12,704 | 12,681 | 12,722 | 12,694 | 12,686 | 12,675 | | | | | | 12,687 |
| 02-Commercial | 429 | 415 | 405 | 407 | 407 | 408 | 411 | | | | | | 412 |
| 04-Irrigation | 10 | 18 | 18 | 17 | 20 | 20 | 21 | | | | | | 18 |
| 06-Hydrants | 491 | 488 | 490 | 488 | 489 | 488 | 489 | | | | | | 489 |
| Non Revenue (CCWC Accts) | 6 | 2 | - | 10 | 9 | 9 | 9 | | | | | | 6 |
| Total | 13,584 | 13,627 | 13,594 | 13,644 | 13,619 | 13,611 | 13,605 | | | | | | |

| 2012 - Actual | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | AVG |
|--------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|--------|
| 01-Residential | 12,613 | 12,645 | 12,643 | 12,637 | 12,639 | 12,621 | 12,595 | 12,608 | 12,639 | 12,647 | 12,653 | 12,624 | 12,630 |
| 02-Commercial | 448 | 425 | 425 | 426 | 426 | 425 | 423 | 427 | 431 | 431 | 432 | 431 | 429 |
| 04-Irrigation | 495 | 495 | 494 | 494 | 498 | 493 | 493 | 490 | 494 | 490 | 489 | 489 | 493 |
| 06-Hydrants | 23 | 25 | 21 | 22 | 20 | 19 | 19 | 17 | 18 | 20 | 19 | 17 | 20 |
| Non Revenue (CCWC Accts) | 9 | 9 | 9 | 9 | 5 | 4 | 6 | 6 | 6 | 6 | 6 | 6 | 7 |
| Total | 13,588 | 13,599 | 13,592 | 13,588 | 13,588 | 13,562 | 13,536 | 13,548 | 13,588 | 13,594 | 13,589 | 13,567 | |

| 2011 - Actual | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | AVG |
|------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|--------|
| 01-Residential | 12,511 | 12,520 | 12,529 | 12,543 | 12,526 | 12,538 | 12,541 | 12,541 | 12,561 | 12,571 | 12,580 | 12,596 | 12,546 |
| 02-Commercial | 400 | 404 | 403 | 402 | 402 | 400 | 401 | 401 | 404 | 404 | 406 | 436 | 405 |
| 03-Industrial | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 04-Irrigation | 501 | 501 | 502 | 502 | 502 | 494 | 492 | 492 | 492 | 500 | 499 | 499 | 498 |
| 06-Hydrants | 11 | 9 | 8 | 8 | 9 | 12 | 11 | 10 | 11 | 13 | 25 | 23 | 13 |
| 07-Bypass Meters | 44 | 44 | 44 | 44 | 44 | 39 | 2 | 2 | 2 | | | | 29 |
| Total | 13,470 | 13,481 | 13,489 | 13,502 | 13,486 | 13,486 | 13,450 | 13,449 | 13,470 | 13,488 | 13,510 | 13,554 | |

| 2010 - Actual | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | AVG |
|------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|--------|
| 01-Residential | 12,436 | 12,458 | 12,477 | 12,468 | 12,483 | 12,481 | 12,488 | 12,489 | 12,487 | 12,489 | 12,492 | 12,503 | 12,479 |
| 02-Commercial | 404 | 403 | 403 | 400 | 404 | 405 | 402 | 403 | 404 | 404 | 404 | 403 | 403 |
| 03-Industrial | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 04-Irrigation | 496 | 497 | 497 | 497 | 499 | 501 | 501 | 501 | 501 | 501 | 501 | 501 | 499 |
| 06-Hydrants | 9 | 9 | 11 | 11 | 11 | 11 | 10 | 9 | 8 | 8 | 8 | 10 | 10 |
| 07-Bypass Meters | 44 | 44 | 44 | 44 | .44 | 44 | 44 | 44 | 44 | 44 | 44 | 44 | 44 |
| Total | 13,392 | 13,414 | 13,435 | 13,423 | 13,444 | 13,445 | 13,448 | 13,449 | 13,447 | 13,449 | 13,452 | 13,464 | |

EPCOR Water Arizona Inc.
 (- Including Chaparral City)
 2013 - 2017 Planning Cycle
 Residential Declining Usage Summary

| Water District | 2011 Residential Connections | Meter Size Used In Dec. Usage Analysis | 2011 Avg. No. of Connections Used in Analysis | 2011 Avg. Res Usage per Month (1,000 gals) | Trended Annual Residential Usage Decline 2007-2011 |
|------------------|------------------------------|--|---|--|--|
| Chaparral City** | 13,486 | 100% | 13,486 | 100% | 10.65 |
| Total | 112,085 | All Meters | 94,448 | | -5.05% |

* Agua Fria trended annual decline % a weighted avg of Anthem's decline based on AF's proportion of 5/8" and 1" res customers

** Chaparral City analysis used all customer classes and all meter sizes

*** Weighted Average excludes Chaparral City

2010

January February March April May June July August September October November December

Res Sales (1,000 Gallons)

Chaparral

| | | | | | | | | | | | |
|---------|--------|--------|---------|---------|---------|---------|---------|---------|---------|---------|-----------|
| 100,333 | 80,129 | 77,896 | 118,171 | 105,931 | 118,264 | 148,014 | 139,504 | 137,543 | 126,020 | 112,679 | 102,839 |
| | | | | | | | | | | | 1,367,325 |

Res Customers

Chaparral

| | | | | | | | | | | | |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 12,436 | 12,458 | 12,477 | 12,468 | 12,483 | 12,481 | 12,488 | 12,489 | 12,487 | 12,489 | 12,492 | 12,503 |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|

Usage per Cust (Gallons)

Chaparral

| | | | | | | | | | | | |
|-------|-------|-------|-------|-------|-------|--------|--------|--------|--------|-------|---------|
| 8,068 | 6,432 | 6,243 | 9,478 | 8,486 | 9,476 | 11,853 | 11,170 | 11,015 | 10,091 | 9,020 | 8,225 |
| | | | | | | | | | | | 109,556 |

Change in Usage per Cust

Chaparral

% Change in Usage per Cust

Chaparral

12 Month Moving Average in Usage per Cust

Chaparral

| 2011 | | | | | | | | | | | | 2012 | |
|---------|----------|--------|---------|---------|---------|---------|---------|-----------|---------|----------|-----------|---------|----------|
| January | February | March | April | May | June | July | August | September | October | November | December | January | February |
| 93,979 | 92,269 | 85,966 | 108,467 | 107,031 | 119,708 | 138,715 | 129,883 | 138,454 | 125,281 | 129,922 | 1,343,229 | 73,554 | 96,025 |
| | | | | | | | | | | | | | 90,225 |
| 12,511 | 12,520 | 12,529 | 12,543 | 12,526 | 12,538 | 12,541 | 12,541 | 12,561 | 12,571 | 12,580 | 12,596 | 12,613 | 12,645 |
| 7,512 | 7,370 | 6,861 | 8,648 | 8,545 | 9,548 | 11,061 | 10,357 | 11,023 | 9,966 | 10,328 | 5,839 | 7,613 | 7,135 |
| | | | | | | | | | | | 107,056 | -2.3% | |
| (556) | 938 | 618 | (830) | 59 | 72 | (792) | (813) | 8 | (125) | 1,308 | (2,386) | 101 | (234) |
| -6.9% | 14.6% | 9.9% | -8.8% | 0.7% | 0.8% | -6.7% | -7.3% | 0.1% | -1.2% | 14.5% | -29.0% | 1.4% | -3.2% |
| 9,130 | 9,083 | 9,161 | 9,213 | 9,144 | 9,149 | 9,155 | 9,089 | 9,021 | 9,022 | 9,011 | 9,120 | 8,921 | 8,930 |

| 2013 Actual | | | | | | | | | | | | | |
|-------------|---------|---------|---------|---------|---------|-----------|---------|----------|-----------|---------|----------|--------|---------|
| 2013 | | | | | | | | | | 2013 | | | |
| March | April | May | June | July | August | September | October | November | December | January | February | March | April |
| 93,383 | 103,272 | 108,763 | 135,063 | 144,720 | 125,573 | 141,647 | 110,938 | 131,165 | 103,763 | 95,409 | 93,744 | 85,486 | 102,078 |
| | | | | | | | | | 1,384,537 | | | | |
| 12,643 | 12,637 | 12,639 | 12,621 | 12,595 | 12,608 | 12,639 | 12,647 | 12,653 | 12,624 | 12,648 | 12,704 | 12,681 | 12,722 |
| 7,386 | 8,172 | 8,605 | 10,701 | 11,490 | 9,960 | 11,207 | 8,772 | 10,366 | 8,220 | 7,543 | 7,379 | 6,741 | 8,024 |
| | | | | | | | | | 109,628 | | | | |
| 525 | (475) | 61 | 1,154 | 429 | (397) | 185 | (1,194) | 39 | 2,380 | (70) | 244 | (645) | (148) |
| 7.6% | -5.5% | 0.7% | 12.1% | 3.9% | -3.8% | 1.7% | -12.0% | 0.4% | 40.8% | -0.9% | 3.4% | -8.7% | -1.8% |
| 8,910 | 8,954 | 8,914 | 8,919 | 9,016 | 9,051 | 9,018 | 9,034 | 8,934 | 8,937 | 9,136 | 9,130 | 9,150 | 9,096 |

data input

| May | June | July |
|---------|---------|---------|
| 116,380 | 131,501 | 132,186 |
| 12,694 | 12,686 | 12,675 |
| 9,168 | 10,366 | 10,429 |
| 563 | (336) | (1,061) |
| 6.5% | -3.1% | -9.2% |
| 9,084 | 9,131 | 9,103 |

Original calculatio

Chaparral

n of declining %

Annual Average Decline
(0.01053)

Chaparral City Water Company Consumption (gallons in 000's)

| 2013 - Actual | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | YTD Total | Q1 | Q2 | Q3 | Q4 |
|----------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------|----------|----------|----------|----------|----------------|----------------|----------------|----------------|----------|
| 5200 - Metered - Residential | 95,409 | 93,744 | 85,486 | 102,078 | 116,380 | 131,501 | 132,186 | | | | | | 756,784 | 274,639 | 349,959 | 132,186 | 0 |
| 5210 - Metered - Commercial | 9,438 | 9,877 | 8,870 | 11,127 | 11,996 | 13,206 | 13,202 | | | | | | 77,516 | 27,985 | 36,329 | 13,202 | 0 |
| 5220 - Metered - Industrial | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | 0 | 0 | 0 | 0 | 0 |
| 5240 - Metered - Irrigation | 10,824 | 8,056 | 8,451 | 10,806 | 15,991 | 20,353 | 23,414 | | | | | | 97,895 | 27,331 | 47,150 | 23,414 | 0 |
| Other Metered (5250, 5260, 5400) | 151 | 257 | 279 | 475 | 412 | 470 | 269 | | | | | | 2,313 | 687 | 1,357 | 269 | 0 |
| Non - Revenue | 63 | 6 | 0 | 291 | 14 | 71 | 79 | | | | | | 524 | 69 | 376 | 79 | 0 |
| Total | 115,885 | 111,740 | 103,086 | 124,777 | 144,793 | 165,601 | 168,150 | 0 | 0 | 0 | 0 | 0 | 935,032 | 330,711 | 435,171 | 168,150 | - |

| 2012 - Actual | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | YTD Total | Q1 | Q2 | Q3 | Q4 |
|----------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|------------------|----------------|----------------|----------------|----------------|
| 5200 - Metered - Residential | 96,025 | 90,225 | 93,383 | 103,272 | 108,763 | 135,063 | 144,720 | 125,573 | 141,647 | 110,938 | 131,165 | 103,763 | 1,384,537 | 279,633 | 347,098 | 411,940 | 345,866 |
| 5210 - Metered - Commercial | 8,927 | 8,281 | 9,375 | 10,441 | 11,593 | 12,669 | 12,575 | 13,397 | 15,529 | 10,773 | 13,258 | 10,591 | 137,409 | 26,583 | 34,703 | 41,501 | 34,622 |
| 5220 - Metered - Industrial | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5240 - Metered - Irrigation | 10,054 | 9,490 | 11,628 | 14,306 | 17,226 | 24,265 | 29,815 | 22,618 | 25,508 | 41,402 | 33,749 | 18,829 | 258,890 | 31,172 | 55,797 | 77,941 | 93,980 |
| Other Metered (5250, 5260, 5400) | 395 | 357 | 85 | 426 | 325 | 134 | 408 | 95 | 515 | 207 | 367 | 106 | 3,420 | 837 | 885 | 1,018 | 680 |
| Non - Revenue | 39 | 39 | 39 | 39 | 39 | 39 | 39 | 39 | 39 | 24 | 47 | 7 | 117 | 0 | 39 | 0 | 78 |
| Total | 115,401 | 108,353 | 114,471 | 128,445 | 137,946 | 172,131 | 187,518 | 161,683 | 183,199 | 163,344 | 178,586 | 133,296 | 1,784,373 | 338,225 | 438,522 | 532,400 | 475,226 |

| | | | | | | | | | | | | | | | | | |
|----------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|------------------|----------------|----------------|----------------|----------------|
| 2012 - Budget | 110,000 | 108,000 | 115,000 | 120,000 | 140,000 | 180,000 | 180,000 | 170,000 | 175,000 | 165,000 | 165,000 | 127,000 | 1,735,000 | 335,000 | 420,000 | 525,000 | 457,000 |
| variance | 5,401 | 353 | (529) | 8,445 | (2,054) | 12,131 | 7,518 | (6,317) | 8,199 | (1,656) | 13,586 | 6,296 | 49,373 | 5,225 | 18,522 | 7,400 | 18,226 |

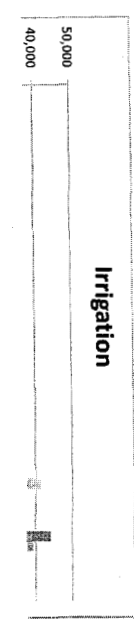
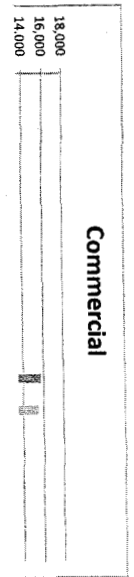
| | | | | | | | |
|------------|------------------|-------------|--------------------------------|-------------|-------------|--------------|-------------|
| YTD | 1,784,373 | 3.6% | Increase year over year | 2.5% | 4.6% | -0.3% | 8.2% |
|------------|------------------|-------------|--------------------------------|-------------|-------------|--------------|-------------|

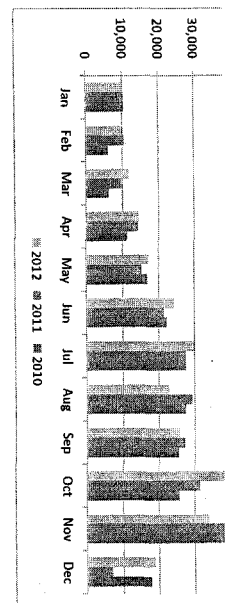
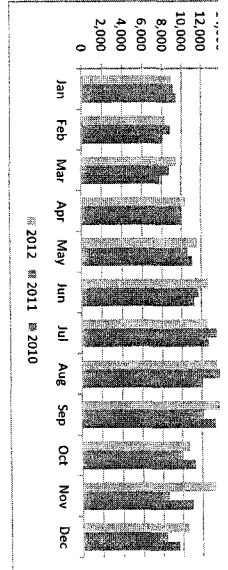
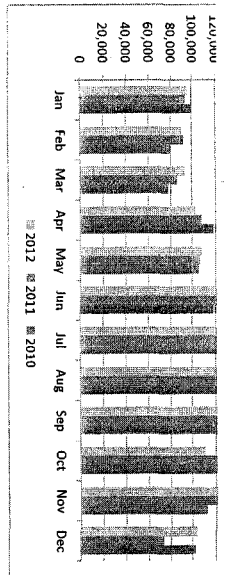
| 2011 - Actual | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | YTD Total | Q1 | Q2 | Q3 | Q4 |
|----------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|---------------|------------------|----------------|----------------|----------------|----------------|
| 5200 - Metered - Residential | 93,979 | 92,269 | 85,966 | 108,467 | 107,031 | 119,708 | 138,715 | 129,883 | 138,454 | 125,281 | 129,922 | 73,554 | 1,343,229 | 272,214 | 335,206 | 407,052 | 328,757 |
| 5210 - Metered - Commercial | 9,127 | 8,825 | 8,770 | 9,986 | 10,650 | 11,735 | 13,423 | 15,735 | 12,180 | 9,964 | 8,605 | 8,358 | 127,358 | 26,722 | 32,371 | 41,338 | 26,927 |
| 5220 - Metered - Industrial | 1 | 5 | 6 | 7 | 9 | 6 | 8 | 11 | | | | | 53 | 12 | 22 | 19 | 0 |
| 5240 - Metered - Irrigation | 10,356 | 10,480 | 9,637 | 14,092 | 15,149 | 21,359 | 27,406 | 29,232 | 27,126 | 31,362 | 44,039 | 7,064 | 247,302 | 30,473 | 50,600 | 83,764 | 82,465 |
| Other Metered (5250, 5260, 5400) | 235 | 298 | 13 | 360 | 494 | 239 | 692 | 444 | 850 | 148 | 597 | 492 | 4,882 | 546 | 1,093 | 1,986 | 1,237 |
| Total | 113,698 | 111,877 | 104,382 | 132,812 | 133,333 | 153,047 | 180,244 | 175,305 | 178,610 | 166,755 | 183,163 | 89,468 | 1,722,803 | 329,967 | 419,292 | 534,159 | 439,386 |

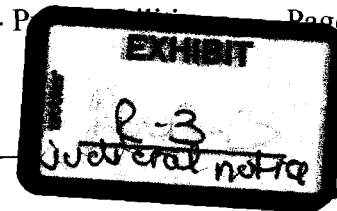
| | | | | | | | |
|------------|------------------|--------------|--------------------------------|-------------|--------------|--------------|--------------|
| YTD | 1,722,803 | -0.7% | Decrease year over year | 7.4% | -1.9% | -1.8% | -3.8% |
|------------|------------------|--------------|--------------------------------|-------------|--------------|--------------|--------------|

| 2010 - Prior Year | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | YTD Total | Q1 | Q2 | Q3 | Q4 |
|----------------------------------|----------------|---------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|------------------|----------------|----------------|----------------|----------------|
| 5200 - Metered - Residential | 100,333 | 80,129 | 77,896 | 118,171 | 105,931 | 118,264 | 148,014 | 139,504 | 137,543 | 126,020 | 112,679 | 102,839 | 1,387,325 | 258,358 | 342,367 | 425,061 | 341,538 |
| 5210 - Metered - Commercial | 9,429 | 8,089 | 7,790 | 9,906 | 11,130 | 11,309 | 12,655 | 12,033 | 13,292 | 11,340 | 11,059 | 9,599 | 127,630 | 25,308 | 32,345 | 37,980 | 31,990 |
| 5220 - Metered - Industrial | 37 | 31 | 5 | 11 | 10 | 12 | 6 | 2 | 4 | 3 | 1 | 10 | 131 | 73 | 33 | 12 | 14 |
| 5240 - Metered - Irrigation | 10,419 | 6,130 | 6,308 | 11,200 | 16,887 | 22,192 | 27,497 | 27,387 | 25,346 | 29,661 | 39,218 | 17,749 | 235,994 | 22,957 | 50,279 | 80,229 | 82,629 |
| Other Metered (5250, 5260, 5400) | 139 | 347 | 22 | 690 | 1,026 | 816 | 530 | 60 | 192 | 180 | 165 | 339 | 4,506 | 508 | 2,532 | 782 | 664 |
| Total | 120,357 | 94,726 | 92,020 | 139,979 | 134,983 | 152,593 | 186,702 | 178,985 | 178,377 | 163,204 | 163,122 | 130,536 | 1,735,586 | 307,104 | 427,555 | 544,064 | 456,862 |

| | |
|------------|------------------|
| YTD | 1,735,586 |
|------------|------------------|







Justia > US Law > US Codes and Statutes > Arizona Revised Statutes > 2005 Arizona Revised Statutes > Title 40 - Public Utilities and Carriers > Arizona Revised Statutes §40-222 Depreciation accounting

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2005 Arizona Revised Statutes - Revised Statutes §40-222 Depreciation accounting

The commission may, after hearing, require public service corporations to carry a proper and adequate depreciation account in accordance with regulations and forms of account it prescribes. It may ascertain and fix the proper and adequate rates of depreciation of the several classes of property for each, and each corporation shall conform its depreciation accounts to the rates so ascertained and fixed, and shall set aside the money so provided for out of earnings and carry such money in a depreciation fund and expend the fund, and the income therefrom, only for the purposes and under rules and regulations, both as to original expenditure and subsequent replacement, as the commission prescribes.

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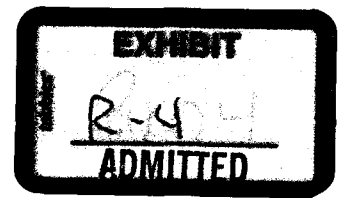
Ask a Lawyer

Question:

Please Ask Your Question Here.
e.g., Do I need a Bankruptcy
Lawyer?

Ask Question

About Legal Answers



COMPANY: CHAPARRAL CITY WATER COMPANY
DOCKET NO: W-02113A-13-0118

Response provided by: Pauline Ahern
Title: Consultant for EPCOR Water

Address: 2355 W. Pinnacle Peak Road, Suite 300
Phoenix, AZ 85027

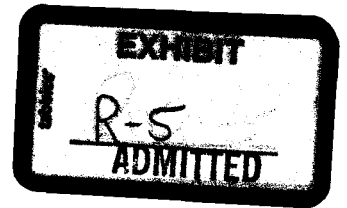
Company Response Number: RUCO 6.04

Q: Please indicate whether debt of Chaparral City Water Co, its affiliates and its parent(s) are rated by the major rating agencies. If so, please provide the ratings for each year 2000 to the present.

A: The present owner of Chaparral City Water Company, EPCOR Water, has only had ownership of CCWC since June 1, 2011 and will be unable to provide the ratings from major rating agencies prior to its ownership. The ratings for EPCOR Utilities, Inc., parent to EPCOR Water USA are attached and labeled as follows:

RUCO 6.04 S&P EPCOR Utilities – 12-20-12.pdf
RUCO 6.04 S&P Research Update – EPCOR Utilities – 7-25-13.pdf
RUCO 6.04 S&P Summary EPCOR Utilities – 7-25-13.pdf
RUCO 6.04 S&P Summary EPCOR Utilities – 12-20-12

COMPANY: CHAPARRAL CITY WATER COMPANY
DOCKET NO: W-02113A-13-0118



Response provided by: Pauline Ahern
Title: Consultant for EPCOR Water

Address: 2355 W. Pinnacle Peak Road, Suite 300
Phoenix, AZ 85027

Company Response Number: RUCO 6.06

Q: Please provide a list of all cost of capital testimonies filed by Ms. Ahern for the period 2000 to the present and provide the following information for each testimony:

- a. Name of utility
- b. Date of testimony
- c. Jurisdiction
- d. Docket number
- e. Cost of equity recommended
- f. Cost of equity authorized

A: Please see attachment labeled "RUCO 6.06 Listing of PAhern's COC Testimonies 2000-Oct 2013.pdf".

Cost of Capital Testimony of Pauline M. Ahern, CRRA, from January 1, 2000 - October 31, 2013

| Cost of Capital Testimony of Pauline M. Altem, CFA, from January 1, 2000 - October 31, 2013 | | | | | | | | | | | |
|---|----------------|---|---|---------------|---------------------|-------------------------------------|------------------------|------------|---------------------|-----------------------------|------------------------|
| Date of Filing | Type of Filing | Client | Commission | Docket Number | Common Equity Ratio | Recommended Return on Common Equity | Overall Rate of Return | Date | Common Equity Ratio | Authorized Return on Equity | Overall Rate of Return |
| 6-Jun-2006 | Rebuttal | Apex New Jersey, Inc. | New Jersey Board of Public Utilities | WR-05121022 | 50.0% | 11.50% | 8.85% | 1/17/2007 | Not Specified | 10.00% | 8.14% |
| 6-Jun-2006 | Rebuttal | NRG Energy Center Pittsburgh | Pennsylvania Public Utility Commission | R-00051435 | 46.25% | 11.45% | 8.700% | 1/11/2006 | Not Specified | Not Specified | Not Specified |
| 5-Jul-2006 | Direct | Tega City Water Service, Inc. | Public Service Commission of South Carolina | 2006-61-WMS | 40.90% | 11.45% - 12.10% | 8.47% - 8.70% | 1/10/2006 | Not Specified | 9.40% | 7.64% |
| 17-Jul-2006 | Direct | United Utility Companies, Inc. | Public Service Commission of South Carolina | 2006-107-WMS | 40.90% | 11.45% - 12.10% | 8.51% - 8.76% | 1/10/2006 | Not Specified | 10.00% | 9.31% |
| 25-Jul-2006 | Rebuttal | Apex New Jersey, Inc. | Public Service Commission of South Carolina | 2006-61-WMS | 40.90% | 11.45% - 12.00% | 8.47% - 8.70% | 1/10/2006 | Not Specified | 9.40% | 7.64% |
| 25-Jul-2006 | Rebuttal | Empireman Water Company | Pennsylvania Public Utility Commission | 2006-61-WMS | 40.90% | 11.70% | 9.022% | 12/29/2006 | 30.76% | 10.60% | 5.46% |
| 1-Jul-2006 | Rebuttal | Aqua Illinois, Inc. - Kankakee Water Division | Illinois Commerce Commission | 06-0325 | 52.00% | 11.60% | 8.922% | 12/29/2006 | 52.35% | 10.45% | 7.78% |
| 1-Jul-2006 | Rebuttal | Aqua Illinois, Inc. - Kankakee Water Division | Illinois Commerce Commission | 06-0325 | 52.00% | 11.60% | 8.922% | 12/29/2006 | 52.35% | 10.45% | 7.78% |
| 1-Jul-2006 | Rebuttal | Aqua Illinois, Inc. - Kankakee Water Division | Illinois Commerce Commission | 06-0325 | 52.00% | 11.60% | 8.922% | 12/29/2006 | 52.35% | 10.45% | 7.78% |
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| 1-Jul-2006 | Rebuttal | Aqua Illinois, Inc. - Kankakee Water Division | Illinois Commerce Commission | 06-0325 | 52.00% | 11.60% | 8.922% | 12/29/2006 | 52.35% | 10.45% | 7.78% |
| 1-Jul-2006 | Rebuttal | Aqua Illinois, Inc. - Kankakee Water Division | Illinois Commerce Commission | 06-0325 | 52.00% | 11.60% | 8.922% | 12/29/2006 | 52.35% | 10.45% | 7.78% |
| 1-Jul-2006 | Rebuttal | Aqua Illinois, Inc. - Kankakee Water Division | Illinois Commerce Commission | 06-0325 | 52.00% | 11.60% | 8.922% | 12/29/2006 | 52.35% | 10.45% | 7.78% |
| 1-Jul-2006 | Rebuttal | Aqua Illinois, Inc. - Kankakee Water Division | Illinois Commerce Commission | 06-0325 | 52.00% | 11.60% | 8.922% | 12/29/2006 | 52.35% | 10.45% | 7.78% |
| 1-Jul-2006 | Rebuttal | Aqua Illinois, Inc. - Kankakee Water Division | Illinois Commerce Commission | 06-0325 | 52.00% | 11.60% | 8.922% | 12/29/2006 | 52.35% | 10.45% | 7.78% |
| 1-Jul-2006 | Rebuttal | Aqua Illinois, Inc. - Kankakee Water Division | Illinois Commerce Commission | 06-0325 | 52.00% | 11.60% | 8.922% | 12/29/2006 | 52.35% | 10.45% | 7.78% |
| 1-Jul-2006 | Rebuttal | Aqua Illinois, Inc. - Kankakee Water Division | Illinois Commerce Commission | 06-0325 | 52.00% | 11.60% | 8.922% | 12/29/2006 | 52.35% | 10.45% | 7.78% |
| 1-Jul-2006 | Rebuttal | Aqua Illinois, Inc. - Kankakee Water Division | Illinois Commerce Commission | 06-0325 | 52.00% | 11.60% | 8.922% | 12/29/2006 | 52.35% | 10.45% | 7.78% |
| 1-Jul-2006 | Rebuttal | Aqua Illinois, Inc. - Kankakee Water Division | Illinois Commerce Commission | 06-0325 | 52.00% | 11.60% | 8.922% | 12/29/2006 | 52.35% | 10.45% | 7.78% |
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Cost of Capital Testimony of Pauline M. Ahern, CRRRA, from January 1, 2000 - October 31, 2013

[illegible]

Cost of Capital Testimony of Pauline M. Ahearn, CRRA, from January 1, 2000 - October 31, 2013

| Date of Filing | Client | Type of Filing | Discl./Rebuttal | Commission | Docket Number | Common Equity Ratio | Recommended Return on Common Equity | Overall Rate of Interest | Date of Order | Common Equity Ratio | Authorized Return on Common Equity |
|----------------|---|----------------|-----------------|---|-------------------|---------------------|-------------------------------------|--------------------------|---------------|---------------------|------------------------------------|
| 8-Mar-2013 | United Water New Jersey, Inc. | Direct | Direct | New Jersey Board of Public Utilities | W-01302010 | 53.4% | 10.90% | 8.21% | (11) | 51.53% | 7.50% |
| 8-Mar-2013 | Aquatica Water Co. of Connecticut | Direct | Direct | Public Utilities Regulatory Authority - CT | 13-02-30 | NA | 11.50% - 11.20% (24) | NA | 9/24/2013 | 51.53% | 8.63% |
| 24-Jun-2013 | Arizona Water Company - Northern Group | Rebuttal | Rebuttal | Arizona Corporation Commission | W-014456-1-2-5348 | 51.95% | 11.30% | 9.11% | 10/19/00 | 51.10% | 10.00% |
| 26-Apr-2013 | Chaquar City Water Company | Direct | Direct | Attorney Corporation Commission | W-02113k-13- | 83.00% | 11.05% | 10.21% | (11) | NA | 8.44% |
| 2-Jul-2013 | United Water New York, Inc | Direct | Direct | New York State Public Service Commission | W-0113k-13- | 52.15% | 10.85% | 8.00% | (11) | NA | 8.00% |
| 2-Jul-2013 | Con Utilities, Inc. | Direct | Direct | British Columbia Utilities Commission | W-014456-1-1-0210 | NA | NA | NA | (11) | NA | NA |
| 7-Aug-2013 | Jones Central Power Light Company | Rebuttal | Rebuttal | New Jersey Board of Public Utilities | ES-1111052 | 47.56% | 10.45% - 11.45% (40) | 8.43% - 8.91% (40) | (11) | NA | NA |
| 2-Aug-2013 | United Utility Companies, Inc. | Direct | Direct | Public Service Regulatory Commission - Carolina | 2013-09-045 | 53.56% | 11.10% | 8.75% | (11) | NA | NA |
| 2-Aug-2013 | United Public Service of New Jersey, Inc. | Direct | Direct | Public Service Regulatory Commission - Carolina | 2013-09-045 | 53.56% | 10.25% | 7.47% | (11) | NA | NA |
| 5-Sep-2013 | United Gas Energy of South Carolina | Direct | Direct | Midwest Public Service Commission | 2013-201-4WS | 47.91% | 10.25% - 11.25% (40) | 8.23% - 8.81% (40) | (11) | NA | NA |
| 2-Oct-2013 | Pioneer Water LLC | Rebuttal | Rebuttal | Indiana Utility Regulatory Commission | 44390-1J | NA | NA | NA | (11) | NA | NA |
| 3-Oct-2013 | United Utility Companies, Inc. | Direct | Direct | Public Service Commission of South Carolina | 2013-19-04WS | 47.56% | 10.45% - 11.45% (40) | 8.43% - 8.91% (40) | (11) | NA | NA |
| 18-Oct-2013 | Utilities Services of South Carolina, Inc. | Direct | Direct | Public Service Commission of South Carolina | 2013-201-4WS | 48.43% | 10.25% - 11.25% (40) | 8.23% - 8.81% (40) | (11) | NA | NA |
| 1-Oct-2013 | Carolina Water Service, Inc. of NC. | Direct | Direct | North Carolina Utility Commission | W-334 SUB 338 | 48.43% | 11.14% | 8.80% | (11) | NA | NA |
| 1-Oct-2013 | Arizona Water Company - Eastern Group - Phase 2 | Rebuttal | Rebuttal | Attorney Corporation Commission | W-014456-1-1-0210 | 50.11% | NA | NA | (11) | NA | NA |
| 8-Nov-2013 | Midwestern Water Company | Direct | Direct | New Jersey Board of Public Utilities | NA | 50.11% | 10.80% | 5.48% | (41) | NA | NA |

N/A = Not Available

Notes:

- (1) Stipulation
- (2) Mr. Allen recommended a return on common equity of 11.65%, while Aqua Alliance, Inc. requested 11.00%.
- (3) Ms. Allen testified to the credit enhancing effect of the potential acquisition of American Water Works by Thames / RWE ag.
- (4) Ms. Allen testified the proper capital structure estimate of this division of Raterpays is 10.25% and recommended to use rate filings subsequent to the potential acquisition of American Water Works by Thames / RWE ag.
- (5) Mr. Allen recommended a return on common equity of 10.75%, while Aqua Alliance, Inc. requested 10.25%.
- (6) Ms. Allen's testimony was limited to supporting the 50 points (0.50%) adjustment to the Florida leverage formula to reflect the small size of water utilities. The authorized rate of return on common equity of 11.45% included the size adjustment.
- (7) Mr. Allen recommended a return on common equity of 11.25%, while United Water Advances, Inc. requested 10.50%.
- (8) Mr. Allen recommended a return on common equity of 11.25%, while Aqua Alliance, Inc. requested 10.25%.
- (9) Mr. Allen recommended a return on common equity of 11.35%, while Aqua Alliance, Inc. requested 10.25%.
- (10) No ROCE specified. Unlike proposed savings sharing mechanism, United Water New Rochelle would retain all earnings attributable to a return up to and including 11.3. Earnings above 10.6% and up to and including 11.3 would be shared equally between customers and shareholders. Earnings above 11.3% would be shared 75% to customers and 25% to shareholders
- (11) Active proposal. No order issued as yet.
- (12) Mr. Allen recommended a return on common equity of 11.50%, RCE = 1.14%, 11 month spread between Moody's A rated public utility bond and Moody's A rated municipal bond yields = 10.36%
- (13) Proposed settlement was rejected by the Commission; rates were maintained at those established in Order No. 2005-328.
- (14) Proposed settlement was rejected by the Commission; rates were maintained at those established in Order No. 2004-254.
- (15) Modified Shared Approach and Double Leveraged Capital Structures.
- (16) The Commission rejected the proposed settlement. The Commission's decision was based on the fact that the proposed settlement was not in the public interest and that the proposed settlement was not in the public interest.
- (17) Based upon a range of ROCE of 9.65% - 10.45%.
- (18) Inherent order order.
- (19) Earnings above 9.4% up to 10.4% ROCE to be shared by Company. Earnings above 10.4% up to 10.6% ROCE to be shared 50% / 50% between customers and Company. Earnings above 10.6% to be shared 75% / 25% between customers and Company, respectively.
- (20) The Commission rejected the proposed settlement. The Commission's decision was based on the fact that the proposed settlement was not in the public interest and that the proposed settlement was not in the public interest.
- (21) Multiple range fair rate request. Data shown for the year 2010. For the year 2011, requested common equity rate is \$3.24%, requested RCE is 12.125% and requested fair rate of return is 9.75%. For the year 2012, requested common equity rate is \$2.26%, requested RCE is 12.125% and requested fair rate of return is 9.75%.
- (22) Multiple range fair rate request. Data shown for the year 2010. For the year 2011, requested common equity rate is \$3.24%, requested RCE is 12.125% and requested fair rate of return is 9.75%. For the year 2012, requested common equity rate is \$2.26%, requested RCE is 12.125% and requested fair rate of return is 9.75%.
- (23) Mr. Allen recommended common equity cost rate 10.00 (if the Weather Contingency Adjustment Mechanism (WCAM) is adopted and 11.80% if the WCAM is not adopted.
- (24) Mr. Allen recommended common equity cost rate 10.00 (if the Weather Contingency Adjustment Mechanism (WCAM) is adopted and 11.80% if the WCAM is not adopted.
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- (80) Mr. Allen recommended common equity



**STATE OF NEW HAMPSHIRE
BEFORE THE
PUBLIC UTILITIES COMMISSION**

AQUARION WATER COMPANY OF NEW HAMPSHIRE, INC.

DOCKET NO. DW 12-085

REBUTTAL TESTIMONY

OF

PAULINE M. AHERN

March 6, 2013

1 **Adjustment to Reflect Company-Specific Risk**

2 **Financial Risk**

3
4 **Q. Does your correction to Mr. Parcell's common equity cost rate analysis**
5 **adequately reflect the greater financial risk of the Company relative to the**
6 **water group?**

7 **A. No. Financial risk is the additional risk created by the introduction of senior**
8 **capital, i.e., debt and preferred stock, into the capital structure. The higher the**
9 **proportion of senior capital in the capital structure, the higher the financial risk**
10 **which must be factored into the common equity cost rate, consistent with the**
11 **previously mentioned basic financial principle of risk and return, i.e., investors**
12 **demand a higher common equity return as compensation for bearing higher**
13 **investment risk.**

14 **Q. Please describe the financial risk inherent in the Company's requested**
15 **capital structure relative to the financial risk of the water group.**

16 **A. The Company experiences greater financial risk than the water group because**
17 **its requested capital structure contains a greater proportion of long-term debt**
18 **than does the water group. The Company's requested long-term debt ratio is**
19 **58.73% as shown on page 1 of Schedule 4 of the Company's permanent rate**
20 **filing. In contrast, as shown on Attachment PMA-10, the water group**
21 **experiences a long-term debt ratio of 50.69% on average at December 31,**
22 **2011.**

23 **Thus, the Company has greater financial risk than the companies in the**
24 **water group. The market data of the water group reflects investors' perception**
25 **of the financial and business risks of the companies in the group and not those**

1 of the Company. Rate of return analysts such as Mr. Parcell rely upon the
2 market data of group(s) of companies as similar in risk as possible to the utility
3 for whom rates are being set. In this instance, Mr. Parcell relied upon a group
4 of publicly-traded water companies for whom the market data necessary for a
5 cost of common equity analysis could be undertaken was available. However,
6 any group of comparable companies may be relatively similar to, but not
7 identical in risk, to the Company for whom rates are being set. Since the market
8 data of the water group reflects the risks of the water group and not the
9 Company, the financial and business risks of the Company must be compared
10 with those of the average company in the water group and adjusted, if
11 necessary, to reflect the unique relative financial (credit) and/or business risk of
12 the Company. Because investors require a higher return in exchange for
13 bearing higher risk, an upward adjustment to the common equity cost rate
14 derived from the market data of the water group companies which have a lower
15 degree of financial and business risk than the Company is necessary.

16 Q. Do you agree with Mr. Parcell when he states on lines 5 – 8 on page 14 of
17 his direct testimony that: "Without a comparison of the Company's
18 capital structures with its affiliated companies, which are frequently inter-
19 twined for financing, it is not feasible to conclude that AWC-NH's capital
20 structure has less equity, and thus more financial risk, than other water
21 utilities?"

22 A. No. The Company informs me that its long-term debt currently consists of three
23 issues, all of which are privately placed with external debt-holders. Therefore,
24 no "inter-twining" exists. Moreover, as will be discussed relative to business
25 risk, it is not the source of funds which gives rise to the risk of an investment,

1 but rather the use of the funds. Therefore, it is irrelevant whether the "inter-
2 twining" tacitly alleged by Mr. Parcell exists. Consequently, a comparison of the
3 Company's financial risk, as measured by the level of debt in its capital
4 structure, with that of the water group is both feasible and necessary since it is
5 the group's market data upon which Mr. Parcell relied in arriving at a
6 recommended range of common equity cost rate.

7 **Q. Is there a way to quantify a financial risk adjustment due to the Company's**
8 **greater financial risk relative to the water group?**

9 **A.** Yes. An indication of the magnitude of the necessary financial risk adjustment
10 is given by the Hamada equation²⁵, which un-levers and then re-levers betas
11 based upon changes in capital structure.

12 The Hamada equation un-levers the median beta of the water group of
13 0.65 with an average December 31, 2011 total equity ratio of 49.31% to 0.39
14 when applied to a 100% common equity ratio and then levers the beta to 0.75
15 using the Company's total (including preferred stock) requested equity ratio of
16 41.27% at December 31, 2011. The re-levered beta, applied to a 8.61%
17 corrected market risk premium and a 4.18% corrected risk-free rate translates to
18 a 10.86%²⁶ common equity cost rate. The difference between the 10.64%
19 relevered beta common equity cost rate and the result of my application of the
20 traditional CAPM for the water group with a median beta of 0.65, 9.78%²⁷ is 86
21 basis points. Thus, a financial adjustment of 86⁶ basis points reflects the greater
22 financial risk of the Company attributable to its lower requested total equity ratio

²⁵ Brigham and Daves 533.

²⁶ $10.64\% = (0.75 \times 8.61\%) + 4.18\%$.

²⁷ $9.78\% = (0.65 \times 8.61\%) + 4.18\%$.

1 of 41.27% at December 13, 2011 compared with the water group's average
2 total equity ratio of 49.31% at December 31, 2011. The Hamada Equation and
3 calculations are as follows:

$$b_l = b_u [1 + (1 - T)(D/S)]$$

4
5
6 Where b_l = Levered beta

7 b_u = Un-levered beta

8 T = Tax Rate

9 (D/S) = Debt to Common Equity Ratio

10
11 To un-lever the beta from a 49.03% average water group total equity ratio, the
12 following equation is used:

$$0.65 = b_u [1 + (1 - 0.35) (50.69\%/49.31\%)]$$

13
14
15 When solved for b_u , $b_u = 0.39$, indicating that the beta for the water group of
16 water group would be 0.39 if their average capital structure contained 100%
17 total equity.

18 To re-lever the beta relative to the Company's 41.27% at December 31,
19 2011 ratemaking total equity ratio, the following equation is used:

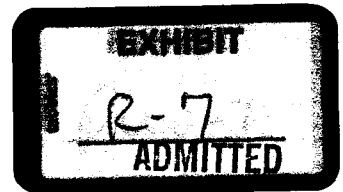
$$b_l = 0.39 [1 + (1 - 0.35) (58.73\%/41.27\%)]$$

20
21
22 When solved for b_l , $b_l = 0.75$, indicating that the beta for the water group would
23 be 0.75, if their average capital structure contained 41.27% total equity.

24 Business Risk Adjustment

25 Q. Does your correction to Mr. Parcell's common equity cost rate analysis
26 adequately reflect the risk implications of the Company's small size
27 relative to the water group?

28 A. No. Company size is a significant element of business risk for which investors
29 expect to be compensated through greater returns. Smaller companies are



BEFORE THE ARIZONA CORPORATION COMMISSION

COMMISSIONERS

BOB STUMP, Chairman
GARY PIERCE
BRENDA BURNS
SUSAN BITTER SMITH
BOB BURNS

IN THE MATTER OF THE APPLICATION OF)
CHAPARRAL CITY WATER COMPANY FOR)
A DETERMINATION OF THE CURRENT FAIR)
VALUE OF ITS UTILITY PLANT AND)
PROPERTY AND FOR INCREASE IN ITS)
RATES AND CHARGES BASED THEREON)

DOCKET NO. W-02113A-13-0118

PREPARED TESTIMONY

OF

DAVID C. PARCELL
PRESIDENT
TECHNICAL ASSOCIATES, INC.

ON BEHALF OF

RESIDENTIAL UTILITY CONSUMERS OFFICE

DECEMBER 9, 2013

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ATTACHMENT

| | |
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EXHIBITS

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|---|-------------|
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| Chaparral City & EPCOR Utilities Capital Structure..... | Schedule 3 |
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| DCF Analyses | Schedule 5 |
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| S&P 500, ROE & M/B..... | Schedule 9 |
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**EXECUTIVE SUMMARY
CHAPARRAL CITY WATER COMPANY
DOCKET NO. W-02113A-13-0118**

My direct testimony provides my estimate of the cost of capital for Chaparral City. My cost of capital recommendation is as follows:

| | <u>Percent</u> | <u>Cost</u> | <u>Return</u> |
|-----------------|----------------|-------------|---------------|
| Long-term Debt | 17.68% | 5.92% | 1.05% |
| Short-term Debt | 0.48% | 0.72% | 0.00% |
| Common Equity | 81.83% | 9.35% | 7.65% |
| Total Capital | 100.00% | | 8.70% |

The primary difference between my 8.70 percent recommendation and the 10.21 percent cost of capital request of Chaparral City is the cost of common equity – I propose a cost of equity of 9.25 percent and Chaparral City requests a cost of equity of 11.05 percent.

My 9.35 percent cost of common equity is derived from my application of three cost of equity models:

| | <u>Range</u> | <u>Mid-Point</u> |
|-----------------------------|--------------|------------------|
| Discounted Flow | 8.7% | 8.70% |
| Capital Asset Pricing Model | 7.2-7.3% | 7.25% |
| Comparable Earnings | 9.0-9.50% | 9.25% |

I also demonstrate that the 11.05 percent cost of equity recommendation of Chaparral City witness Ahern significantly over-states the Company's actual cost of equity.

I. INTRODUCTION

Q. Please state your name, occupation and business address.

A. My name is David C. Parcell. I am President of Technical Associates, Inc. My business address is 9030 Stony Point Parkway, Suite 580, Richmond, VA 23235.

Q. Please summarize your education and work experience as it pertains to the presentation of your testimony in this proceeding.

A. I earned B.A. (1969) and M.A. (1970) degrees in Economics from Virginia Polytechnic Institute and State University (VA Tech). I also earned a Master of Business Administration from Virginia Commonwealth University (1985). I have been a consulting economist with Technical Associates since 1970. Over the past forty-plus years, I have been primarily involved in the preparation and presentation of expert testimony that focused on various financial issues associated with the regulation of public utilities. In connection with this, I have filed testimony and/or testified in about 500 public utility proceedings regarding the cost of capital and related issues. These testimonies included electric utilities, natural gas distribution utilities, telephone/telecommunications companies, water and wastewater utilities, and natural gas pipelines. I have also prepared cost of capital studies and/or testified in a significant number of instances involving other types of regulated enterprises, such as insurance companies, barges and consumer finance companies. Attachment 1 provides a more complete description of my educational and professional qualifications.

Q. Have you previously testified before the Arizona Corporation Commission?

A. Yes, I have. Since 1984, I have testified in approximately twenty-five proceedings before this Commission, involving electric, natural gas, telephone and water utilities. These testimonies have been presented on behalf of several parties, including the Commission's Utilities Division Staff, Residential Utility Consumer Office ("RUCO"), and other intervenor groups.

1 **Q. What is the purpose of your testimony in this proceeding?**

2 A. Technical Associates has been retained by RUCO to address the cost of capital issues in
3 the current application of Chaparral City Water Company ("Chaparral City"). I have
4 performed independent analyses and am recommending a cost of common equity, capital
5 structure and total cost of capital for Chaparral City.
6

7 **Q. Have you prepared an exhibit in support of your testimony?**

8 A. Yes, I have prepared one exhibit, identified as Schedule 1 through Schedule 10. This
9 exhibit was prepared either by me or under my direction. The information contained in
10 this exhibit is correct to the best of my knowledge and belief.
11

12 **II. RECOMMENDATIONS AND SUMMARY**

13 **Q. What are your recommendations in this proceeding?**

14 A. My overall cost of capital recommendation for Chaparral City is shown on Schedule 1
15 and can be summarized as follows:
16

| | Percent | Cost | Return |
|-----------------|---------|-------------|------------|
| Long-Term Debt | 17.68% | 5.92% | 1.05% |
| Short-Term Debt | 0.48% | 0.72% | 0.00% |
| Common Equity | 81.83% | 8.70-10.00% | 7.12-8.18% |
| Total | 100.00% | | 8.17-9.27% |

20
21 **Q. Please summarize your analyses and conclusions.**

22 A. This proceeding is concerned with Chaparral City's regulated water utility operations in
23 Arizona. My analyses are concerned with the Company's total cost of capital. The first
24 step in performing these analyses is the development of the appropriate capital structure.
25 Chaparral City proposes use of its actual capital structure ratios as of "end of projected
26 year." I, in turn, use the actual test year capital structure ratios. Even though this capital
27 structure differs significantly from that of most water utilities (including the group of
28 proxy water utilities used to estimate the cost of common equity) I have also used this
29 capital structure in my analyses.
30

1 The second step in a cost of capital calculation is a determination of the embedded cost
2 rate of debt. I have used the test period cost rates for long-term debt of Chaparral City
3 (i.e., 5.92 percent) and short-term debt (i.e., 0.72 percent).

4
5 The third step in the cost of capital calculation is the estimation of the cost of common
6 equity ("COE"). I have employed three recognized methodologies to estimate the COE
7 for Chaparral City. Each of these methodologies is applied to a group of proxy water
8 utilities. These three methodologies and my findings are:

| Methodology | Ranges |
|------------------------------------|----------------------------|
| Discounted Cash Flow (DCF) | 8.7% |
| Capital Asset Pricing Model (CAPM) | 7.2-7.3% (7.25% mid-point) |
| Comparable Earnings (CE) | 9.0-10.0% (9.5% mid-point) |

9
10
11
12
13 Based upon these findings, it is my conclusion that the COE for Chaparral City is within
14 a range of 8.70 percent to 10.00 percent (9.35 percent average), which is based upon the
15 values for the DCF and CE results. I recommend 9.35 percent as the COE for Chaparral
16 City. Combining these three steps into weighted cost of capital results in an overall rate
17 of return of 8.17 percent to 9.23 percent (8.70 percent average) which incorporates a
18 COE of 8.7 percent to 10.0 percent (9.35 percent average).

19
20 **III. ECONOMIC/LEGAL PRINCIPLES AND METHODOLOGIES**

21 **Q. What are the primary economic and legal principles that establish the standards for**
22 **determining a fair rate of return for a regulated utility?**

23 **A.** Public utility rates are normally established in a manner designed to allow the recovery of
24 their costs, including capital costs. This is frequently referred to as "cost of service"
25 ratemaking. Rates for regulated public utilities traditionally have been primarily
26 established using the "rate base - rate of return" concept. Under this method, utilities are
27 allowed to recover a level of operating expenses, taxes, and depreciation deemed
28 reasonable for rate-setting purposes, and are granted an opportunity to earn a fair rate of
29 return on the assets utilized (*i.e.* rate base) in providing service to their customers.
30

1 The rate base is derived from the asset side of the utility's balance sheet as a dollar
2 amount and the rate of return is developed from the liabilities/owners' equity side of the
3 balance sheet as a percentage. Thus, the revenue impact of the cost of capital is derived
4 by multiplying the rate base by the rate of return, including income taxes.

5
6 The rate of return is developed from the cost of capital, which is estimated by weighting
7 the capital structure components (*i.e.* debt, preferred stock, and common equity) by their
8 percentages in the capital structure and multiplying these values by their cost rates. This
9 is also known as the weighted cost of capital.

10
11 Technically, "fair rate of return" is a legal and accounting concept that refers to an ex
12 post (after the fact) earned return on an asset base, while the cost of capital is an
13 economic and financial concept which refers to an ex ante (before the fact) expected, or
14 required, return on a capital base. In regulatory proceedings, however, the two terms are
15 often used interchangeably, and I have equated the two concepts in my testimony.

16
17 From an economic standpoint, a fair rate of return is normally interpreted to mean that an
18 efficient and economically managed utility will be able to maintain its financial integrity,
19 attract capital, and establish comparable returns for similar risk investments. These
20 concepts are derived from economic and financial theory and are generally implemented
21 using financial models and economic concepts.

22
23 Although I am not a lawyer and I do not offer a legal opinion, my testimony is based on
24 my understanding that two United States Supreme Court decisions provide the
25 controlling standards for a fair rate of return. The first decision is Bluefield Water Works
26 and Improvement Co. v. Public Serv. Comm'n of West Virginia, 262 U.S. 679 (1923). In
27 this decision, the Court stated:

28
29 The annual rate that will constitute just compensation depends upon many
30 circumstances and must be determined by the exercise of fair and

1 enlightened judgment, having regard to all relevant facts. A public utility
2 is entitled to such rates as will permit it to earn a return on the value of the
3 property which it employs for the convenience of the public equal to that
4 generally being made at the same time and in the same general part of the
5 country on investments in other business undertakings which are attended
6 by corresponding risks and uncertainties; but it has no constitutional right
7 to profits such as are realized or anticipated in highly profitable enterprises
8 or speculative ventures. The return should be reasonably sufficient to
9 assure confidence in the financial soundness of the utility, and should be
10 adequate, under efficient and economical management, to maintain and
11 support its credit and enable it to raise the money necessary for the proper
12 discharge of its public duties. A rate of return may be reasonable at one
13 time, and become too high or too low by changes affecting opportunities
14 for investment, the money market, and business conditions generally.
15

16 It is generally understood that the Bluefield decision established the following standards
17 for a fair rate of return: comparable earnings, financial integrity, and capital attraction. It
18 also noted that required returns change over time, and there is an underlying assumption
19 that the utility be operated efficiently.
20

21 The second decision is Federal Power Comm'n v. Hope Natural Gas Co., 320 U.S. 591
22 (1942). In that decision, the Court stated:
23

24 The rate-making process under the [Natural Gas] Act, i.e., the fixing of
25 'just and reasonable' rates, involves a balancing of the investor and
26 consumer interests From the investor or company point of view it is
27 important that there be enough revenue not only for operating expenses
28 but also for the capital costs of the business. These include service on the
29 debt and dividends on the stock. By that standard the return to the equity
30 owner should be commensurate with returns on investments in other
31 enterprises having corresponding risks. That return, moreover, should be
32 sufficient to assure confidence in the financial integrity of the enterprise,
33 so as to maintain its credit and to attract capital.
34

35 The three economic and financial parameters in the Bluefield and Hope decisions -
36 comparable earnings, financial integrity, and capital attraction - reflect the economic
37 criteria encompassed in the "opportunity cost" principle of economics. The opportunity
38 cost principle provides that a utility and its investors should be afforded an opportunity

1 (not a guarantee) to earn a return commensurate with returns they could expect to achieve
2 on investments of similar risk. The opportunity cost principle is consistent with the
3 fundamental premise on which regulation rests, namely, that it is intended to act as a
4 surrogate for competition.

5
6 I understand that because Arizona is a "Fair Value" state, Hope and Bluefield do not set
7 forth the legal requirements applicable to determining fair rate of return in Arizona. In
8 Simms v. Round Valley Light & Power Company, 294 P.2d 378 (1956), the Arizona
9 Supreme Court took exception to application of the following principle in Arizona since
10 the Constitution mandates consideration of fair value:

11
12 "In the Hope case the court, in testing the reasonableness of rates fixed by
13 the Federal Power Commission under the Natural Gas Act, 15 U.S.C.A
14 Section 717 et seq., after holding that Congress had provided no formula
15 by which just and reasonable rates were to be determined, ruled that it was
16 the final result reached and not the method used in reaching the result that
17 was controlling and that it was unimportant to 'determine the various
18 permissible ways in which any rate base on which the return is computed
19 might be arrived at'."

20
21 My testimony does not advocate that the Commission ignore the Simms holding in this
22 regard, or the fair value of Chaparral City property, which it is required to consider under
23 Article 15, Section of the Arizona Constitution. Rather, I find the Hope and Bluefield
24 decisions can be helpful in their discussion of comparable earnings, financial integrity
25 and capital attraction. I note that Chaparral City Witness Ahern also cites the Hope and
26 Bluefield cases as guidelines for evaluating the cost of capital for the Company.

27
28 **Q. Is Chaparral city requesting a "fair value" increment to this proceeding?**

29 A. No, it is not. It is my understanding that Chaparral City maintains that its original cost
30 rate base and its fair value rate base are the same.

31

1 **Q. How can the Bluefield and Hope parameters be employed to estimate the cost of**
2 **capital for a utility?**

3 A. Neither the courts nor economic/financial theory has developed exact and mechanical
4 procedures for precisely determining the cost of capital. This is the case because the cost
5 of capital is an opportunity cost and is prospective-looking, which dictates that it must be
6 estimated. However, there are several useful models that can be employed to assist in
7 estimating the COE, which is the capital structure item that is the most difficult to
8 determine. These include the DCF, CAPM, CE and risk premium ("RP") methods. I use
9 three methodologies to determine Chaparral City's COE: the DCF, CAPM, and CE
10 methods. I have not directly employed a RP model in my analyses although, as discussed
11 later, my CAPM analysis is a form of the RP methodology. Each of these methodologies
12 will be described in more detail later in my testimony.

13
14 **IV. GENERAL ECONOMIC CONDITIONS**

15 **Q. Are economic and financial conditions important in determining the cost of capital**
16 **for a public utility?**

17 A. Yes. The cost of capital, for both fixed-cost (debt and preferred stock) components and
18 common equity, are determined in part by current and prospective economic and
19 financial conditions. At any given time, each of the following factors has an influence on
20 the cost of capital:

- 21 • The level of economic activity (i.e., growth rate of the economy);
- 22 • The stage of the business cycle (i.e., recession, expansion, or transition);
- 23 • The level of inflation;
- 24 • The level and trend of interest rates; and,
- 25 • Expected economic conditions.

26 My understanding is that this position is consistent with the Bluefield decision that noted
27 "[a] rate of return may be reasonable at one time and become too high or too low by
28 changes affecting opportunities for investment, the money market, and business
29 conditions generally." Bluefield, 262 U.S. at 693.

1 **Q. What indicators of economic and financial activity did you evaluate in your**
2 **analyses?**

3 A. I examined several sets of economic statistics from 1975 to the present. I chose this time
4 period because it permits the evaluation of economic conditions over four full business
5 cycles, allowing for an assessment of changes in long-term trends. This period also
6 approximates the beginning and continuation of active rate case activities by public
7 utilities.

8
9 A business cycle is commonly defined as a complete period of expansion (recovery and
10 growth) and contraction (recession). A full business cycle is a useful and convenient
11 period over which to measure levels and trends in long-term capital costs because it
12 incorporates the cyclical (i.e., stage of business cycle) influences, and thus, permits a
13 comparison of structural (or long-term) trends.

14
15 **Q. Please describe the timeframe of the four prior business cycles and the current**
16 **cycle.**

17 A. The four prior complete cycles and current cycle cover the following periods:

| <u>Business Cycle</u> | <u>Expansion Cycle</u> | <u>Contraction Period</u> |
|-----------------------|------------------------|---------------------------|
| 1975-1982 | Mar. 1975-July 1981 | Aug. 1981-Oct. 1982 |
| 1982-1991 | Nov. 1982-July 1990 | Aug. 1990-Mar. 1991 |
| 1991-2001 | Apr. 1991-Mar. 2001 | Apr. 2001-Nov. 2001 |
| 2001-2009 | Dec. 2001-Nov. 2007 | Dec. 2007-June 2009 |
| Current | July 2009- | |

22
23 Source: National Bureau of Economic Research, "Business Cycle
24 Expansions and Contractions."

25 **Q. Do you have any general observations concerning the recent trends in economic**
26 **conditions and their impact on capital costs over this broad period?**

1 A. Yes, I do. Until the end of 2007, the United States economy had enjoyed general
2 prosperity and stability since the early 1980s.¹ This period had been characterized by
3 longer economic expansions, relatively tame contractions, low and declining inflation,
4 and declining interest rates and other capital costs.

5
6 However, in 2008 and 2009, the economy declined significantly, initially as a result of
7 the 2007 collapse of the “sub-prime” mortgage market and the related liquidity crisis in
8 the financial sector of the economy. Subsequently, this financial crisis intensified with a
9 more broad-based decline, initially based on a substantial increase in petroleum prices
10 and a dramatic decline in the U.S. financial sector, culminating with the collapse and/or
11 bailouts of a significant number of well-known institutions such as Bear Stearns, Lehman
12 Brothers, Merrill Lynch, Freddie Mac, Fannie Mae, AIG and Wachovia. The recession
13 also witnessed the demise of national companies such as Circuit City and the
14 bankruptcies of automotive manufacturers such as Chrysler and General Motors.

15
16 This decline has been described as the worst financial crisis since the Great Depression
17 and has been referred to as the “Great Recession.” Since 2008, the U.S. and other
18 governments have implemented and continue to implement unprecedented actions to
19 attempt to correct or minimize the scope and effects of this recession.

20
21 The recession reached its low point in mid-2009 and the economy has since begun to
22 expand again, although at a slow and uneven rate. However, the length and severity of the
23 recession, as well as a relatively slow and uneven recovery, indicates that the impacts of
24 the recession have been and will be felt for an extended period of time. As an example of
25 this, even in the fifth year of the recovery/expansion, the U.S. unemployment rate still

¹ There was a “Tech Bubble” in 1999-2000, in which prices of many technology stocks encountered a dramatic run-up that was followed by an equally dramatic decline in 2001-2002.

1 stands at 7.3 percent² - close to the highest unemployment rate experienced over the last
2 several decades.

3
4 **Q. Please describe recent and current economic and financial conditions and their**
5 **impact on the cost of capital.**

6 A. Schedule 2 shows several sets of relevant economic data for the cited time periods. Pages
7 1 and 2 contain general macroeconomic statistics; pages 3 and 4 show interest rates; and
8 pages 5 and 6 contain equity market statistics.

9
10 Pages 1 and 2 show that 2007 was the sixth year of an economic expansion but, as I
11 previously noted, the economy subsequently entered a significant decline, as indicated by
12 the growth in real (i.e., adjusted for inflation) Gross Domestic Product ("GDP"),
13 industrial production, and an increase in the unemployment rate. This recession lasted
14 until mid-2009, making it a longer-than-normal recession, as well as a much deeper
15 recession. Since then, economic growth has been erratic and lower than the initial
16 periods of prior expansions.

17
18 Pages 1 and 2 also show the rate of inflation. As reflected in the Consumer Price Index
19 ("CPI"), for example, inflation rose significantly during the 1975-1982 business cycle
20 and reached double-digit levels in 1979-1980. The rate of inflation declined substantially
21 beginning in 1981, and remained at or below 6.1 percent during the 1983-1991 business
22 cycle. Since 2008, the CPI has been 3 percent or lower, with 2012 being only 1.7
23 percent. It is thus apparent that the rate of inflation has generally been declining over the
24 past several business cycles. Current levels of inflation are at the lowest levels of the past
25 35 years and are indicative of low inflation, which is reflective of lower capital costs.³
26

² As of October, 2013.

³ The rate of inflation is one component of interest rate expectations of investors, who generally expect to receive a return in excess of the rate of inflation. Thus, a lower rate of inflation has a downward impact on interest rates and other capital costs.

1 **Q. What have been the trends in interest rates over the four prior business cycles and**
2 **at the current time?**

3 A. Pages 3 and 4 show several series of interest rates. Rates rose sharply to record levels in
4 1975-1981 when the inflation rate was high and generally rising. Interest rates declined
5 substantially in conjunction with inflation rates during the remainder of the 1980s and
6 throughout the 1990s. Interest rates declined even further from 2000-2005 and generally
7 recorded their then-lowest levels since the 1960s.

8
9 Since 2008, the Federal Reserve has lowered the Federal Funds rate (i.e., short-term rate)
10 to 0.25 percent, an all-time low. The Federal Reserve has also purchased U.S. Treasury
11 securities to stimulate the economy, a process referred to as Quantitative Easing. As seen
12 on page 4, in 2012 both U.S. and corporate bond yields declined to their lowest levels in
13 the past four business cycles and in more than 35 years. Interest rates have risen from
14 those lows since the beginning of 2013. Even with the recent increases, both government
15 and corporate lending rates remain at historically low levels, again reflective of lower
16 capital costs.

17
18 **Q. What does this schedule show for trends of common share prices?**

19 A. Pages 5 and 6 show several series of common stock prices and ratios. These indicate that
20 stock prices were essentially stagnant during the high inflation/high interest rate
21 environment of the late 1970s and early 1980s. The 1983-1991 business cycle and the
22 more recent cycles witnessed a significant upward trend in stock prices. The beginning
23 of the recent financial crisis saw stock prices decline precipitously, as stock prices in
24 2008 and early 2009 were down significantly from peak 2007 levels, reflecting the
25 financial/economic crisis. Beginning in the second quarter of 2009, prices have
26 recovered substantially and have ultimately reached and exceeded the levels achieved
27 prior to the "crash."

28
29 **Q. What conclusions do you draw from your discussion of economic and financial**
30 **conditions?**

1 A. It is apparent that recent economic and financial circumstances have been different from
2 any that have prevailed since at least the 1930s. The late 2008-early 2009 deterioration in
3 stock prices, the decline in U.S. Treasury bond yields, and an increase in corporate bond
4 yields were evidenced in the then-evident “flight to safety.” On the other side of this
5 “flight to safety” is the negative perception of the recent declines in capital costs and
6 returns, which significantly reduced the value of most retirement accounts, investment
7 portfolios and other assets. One significant aspect of this has been a decline in investor
8 expectations of returns. This is evident in several ways: 1) lower interest rates on bank
9 deposits; 2) lower interest rates on U.S. Treasury and corporate bonds; and, 3) lower
10 increases in Social Security cost of living benefits⁴. Finally, as noted above, utility bond
11 interest rates are currently at levels below those prevailing prior to the financial crisis of
12 late 2008 to early 2009 and are near the lowest levels in the past 35 years.

13
14 **V. CHAPARRAL CITY’S OPERATIONS AND RISKS**

15 **Q. Please describe Chaparral City.**

16 A. Chaparral City is a regulated utility that is “principally engaged in the purchase,
17 treatment, distribution, and sale of water to about 13,000 customers in the Town of
18 Fountain Hills and in a small portion of Scottsdale, Arizona.”⁵

19
20 **Q. Who owns Chaparral City?**

21 A. Chaparral City is a wholly-owned subsidiary of EPCOR Utilities, Inc. Prior to EPCOR
22 Utilities’ purchase of Chaparral City in 2011, it was owned by American States Water
23 Company.

24
25 **Q. Please describe EPCOR Utilities.**

26 A. According to its website, the business of EPCOR Utilities is to “build, own and operate
27 electrical transmission and distribution networks, water and wastewater treatment

⁴ The anticipated increase in 2014 social security benefits is 1.5 percent – near an all-time low.

⁵ Source: Chaparral City website.

1 facilities and infrastructure in Canada and the United States. EPCOR Utilities is
2 headquartered in Edmonton, Alberta. Its sole shareholder is the City of Edmonton.

3
4 **Q. How is Chaparral City financed?**

5 A. All of Chaparral City's equity capital is owned EPCOR Utilities. Chaparral City issues
6 its own debt.

7
8 **Q. Is it feasible to directly assess the perceived risk of Chaparral City relative to other**
9 **water utilities?**

10 A. No, it is not. Chaparral City does not have rated debt, so it is not possible to compare its
11 debt ratings with other water utilities. In addition, neither Chaparral City nor its parent
12 company is followed by Value Line, so it is not possible to compare Chaparral City's
13 beta, safety, or financial strength with other water utilities.

14
15 **Q. Ms. Ahern claims (page 44 and elsewhere) that Chaparral City's relatively small**
16 **size increases its risk. Do you agree?**

17 A. No, I do not. Chaparral City does not raise its own equity capital; rather, its capital is
18 owned and provided by EPCOR Utilities. As a result, there is no legitimate "small size"
19 aspect to Chaparral City's cost of equity, such as that proposed by Ms. Ahern.

20
21 **VI. CAPITAL STRUCTURE AND COST OF DEBT**

22 **Q. What is the importance of determining a proper capital structure in a regulatory**
23 **framework?**

24 A. A utility's capital structure is important because the concept of rate base - rate of return
25 regulation requires the capital structure to be utilized in estimating the total cost of
26 capital. Within this framework, it is proper to ascertain whether the utility's capital
27 structure is appropriate relative to its level of business risk and relative to other utilities.

28
29 As discussed in Section III of my testimony, the purpose of determining the proper
30 capital structure for a utility is to ascertain its capital costs. The rate base - rate of return

concept recognizes the assets employed in providing utility services and provides for a return on these assets by identifying the liabilities and common equity (and their cost rates) used to finance the assets. In this process, the rate base is derived from the asset side of the balance sheet and the cost of capital is derived from the liabilities/owners' equity side of the balance sheet. The inherent assumption in this procedure is that the dollar values of the capital structure and the rate base are approximately equal and the former is utilized to finance the latter.

The common equity ratio (*i.e.* the percentage of common equity in the capital structure) is the capital structure item which normally receives the most attention. This is the case because common equity: (1) usually commands the highest cost rate; (2) generates associated income tax liabilities; and (3) causes the most controversy since its cost cannot be precisely determined.

Q. What are the historic capital structure ratios of Chaparral City and EPCOR Utilities?

A. I have examined the historic (2008-2012) capital structure ratios of Chaparral City and EPCOR Utilities. See Schedule 3. Chaparral City's common equity ratios are:

| | <u>Including S-T Debt</u> | <u>Excluding S-T Debt</u> |
|------|---------------------------|---------------------------|
| 2008 | 71.5% | 78.8% |
| 2009 | 74.8% | 79.4% |
| 2010 | 79.4% | 81.2% |
| 2011 | 80.3% | 82.2% |
| 2012 | 74.1% | 85.6% |

Chaparral City is seen to have maintained capital structure with common equity ratios of over 74 percent.

Correspondingly, EPCOR Utilities common equity ratios are:

| | <u>Including S-T Debt</u> | <u>Excluding S-T Debt</u> |
|------|---------------------------|---------------------------|
| 2011 | 58.0% | 58.3% |
| 2012 | 53.1% | 53.3% |

Q. How do these capital structures compare to those of investor-owned water utilities?

A. Schedule 4 shows the common equity ratios (including short-term debt in capitalization) for the group of proxy water utilities identified in a following section of my testimony. These are:

| | <u>Value Line Water Group</u> |
|------|-----------------------------------|
| 2008 | 50% |
| 2009 | 48% |
| 2010 | 46% |
| 2011 | 47% |
| 2012 | 48% |

These common equity ratio ranges are much lower than Chaparral City's ratios. They are also slightly lower than those of EPCOR Utilities.

Q. What capital structure ratio has Chaparral City requested in this proceeding?

A. Company witness Pauline Ahern requests use of Chaparral City's capital structure on a consolidated basis:

| <u>Capital Item</u> | <u>%</u> |
|---------------------|----------|
| Long-Term Debt | 16.60% |
| Common Equity | 83.40% |

These reflect the Company's actual capital structure ratios as of the "end of projected year."

Q. What capital structure do you propose to use in this proceeding?

1 A. I have used Chaparral City's actual test year capital structure. I note that Chaparral
2 City's capital structure contains significantly more equity (in percentage terms) than the
3 proxy utilities used to estimate the cost of common equity. This is correspondingly a
4 factor that should be considered in establishing the cost of equity in this proceeding.

5
6 **Q. What is the cost rate of debt in the Company's Application?**

7 A. Chaparral City's filing requests a cost of long term debt of 5.97 percent, which is the
8 Company's actual rate as of "end or projected year." I use actual test year costs of long-
9 term and short term debt in my cost of capital analyses, which are 5.92 percent and 0.72
10 percent, respectively.

11
12 **Q. Can the COE be determined with the same degree of precision as the cost of debt?**

13 A. No. The cost rates of debt are largely determined by interest payments, issue prices, and
14 related expenses. The COE, on the other hand, cannot be precisely quantified, primarily
15 because this cost is an opportunity cost. As mentioned previously, there are several
16 models that can be employed to estimate the COE. Three of the primary methods - DCF,
17 CAPM, and CE - are developed in the following sections of my testimony.

18
19 **VII. SELECTION OF PROXY GROUP**

20 **Q. How have you estimated the COE for Chaparral City?**

21 A. Chaparral City is not a publicly-traded company. Its parent company (EPCOR Utilities)
22 also is not publicly-traded. Consequently, it is not possible to directly apply COE models
23 to these entities. However, in cost of capital analyses, it is customary to analyze groups
24 of comparison, or "proxy," companies as a substitute for Chaparral City to determine its
25 COE.

26
27 I have accordingly selected such a group for comparison to Chaparral City. This proxy
28 group is selected from the group of nine water utilities included in Value Line Investment
29 Survey. This is the same proxy group employed by Chaparral City witness Ahern in her
30 COE analyses.

VIII. DCF ANALYSIS

Q. What is the theory and methodological basis of the DCF model?

A. The DCF model is one of the oldest and most commonly-used models for estimating the COE for public utilities. The DCF model is based on the "dividend discount model" of financial theory, which maintains that the value (price) of any security or commodity is the discounted present value of all future cash flows.

The most common variant of the DCF model assumes that dividends are expected to grow at a constant rate (the "constant growth" or "Gordon DCF model"). In this framework, the cost of capital is derived from the following formula:

$$K = \frac{D}{P} + g$$

where: P = current price
 D = current dividend rate
 K = discount rate (cost of capital)
 g = constant rate of expected growth

This formula essentially recognizes that the return expected or required by investors is comprised of two factors: the dividend yield (current income) and expected growth in dividends (future income).

Q. Please explain how you employ the DCF model.

A. I use the constant growth DCF model. In doing so, I combine the current dividend yield for each group of proxy utility stocks described in the previous section with several indicators of expected dividend growth.

Q. How did you derive the dividend yield component of the DCF equation?

1 A. Several methods can be used to calculate the dividend yield component. These methods
2 generally differ in the manner in which the dividend rate is employed (*i.e.* current versus
3 future dividends or annual versus quarterly compounding of dividends). I believe the
4 most appropriate dividend yield component is a quarterly compounding variant, which is
5 expressed as follows:

$$\text{Yield} = \frac{D_0(1 + 0.5g)}{P_0}$$

6
7 This dividend yield component recognizes the timing of dividend payments and dividend
8 increases.

9
10 The P_0 in my yield calculation is the average of the high and low stock price for each
11 proxy company for the most recent three month period (September-November 2013).
12 The D_0 is the current annualized dividend rate for each proxy company.

13
14 **Q. How do you estimate the dividend growth component of the DCF equation?**

15 A. The DCF model's dividend growth rate component is usually the most crucial and
16 controversial element involved in using this methodology. The objective of estimating
17 the dividend growth component is to reflect the growth expected by investors that is
18 embodied in the price (and yield) of a company's stock. As such, it is important to
19 recognize that individual investors have different expectations and consider alternative
20 indicators in deriving their expectations. This is evidenced by the fact that every
21 investment decision resulting in the purchase of a particular stock is matched by another
22 investment decision to sell that stock.

23
24 A wide array of indicators exists for estimating investors' growth expectations. As a
25 result, it is evident that investors do not always use one single indicator of growth. It
26 therefore, is necessary to consider alternative dividend growth indicators in deriving the
27 growth component of the DCF model. I have considered five indicators of growth in my
28 DCF analyses. These are:

1. Years 2008-2012 (5-year average) earnings retention, or fundamental growth;
2. Five-year average of historic growth in earnings per share (EPS), dividends per share (DPS), and book value per share (BVPS);
3. Years 2013, 2014 and 2016-2018 projections of earnings retention growth (per Value Line);
4. Years 2010-2012 to 2016-2018 projections of EPS, DPS, and BVPS (per Value Line); and,
5. Five-year projections of EPS growth (per First Call).

I believe this combination of growth indicators is a representative and appropriate set with which to begin the process of estimating investor expectations of dividend growth for the groups of proxy companies. I also believe that these growth indicators reflect the types of information that investors consider in making their investment decisions. As I indicated previously, investors have an array of information available to them, all of which should be expected to have some impact on their decision-making process.

Q. Please describe your DCF calculations.

A. Schedule 5 presents my DCF analysis. Page 1 shows the calculation of the "raw" (*i.e.* prior to adjustment for growth) dividend yield for each proxy company. Pages 2 and 3 show the growth rates for the groups of proxy companies. Page 4 shows the "raw" DCF calculations, which are presented on several bases: mean, median, and high values. These results can be summarized as follows:

| | Mean | Median | Mean High ¹ | Median High ¹ |
|------------------------|------|--------|---------------------------|-----------------------------|
| Value Line Water Group | 7.4% | 7.5% | 8.7% | 8.7% |

¹ Using only the highest growth rate.

I note that the individual DCF calculations shown on Schedule 5 should not be interpreted to reflect the expected cost of capital for individual companies in the proxy

1 groups; rather, the individual values shown should be interpreted as alternative
2 information considered by investors.

3
4 **Q. What do you conclude from your DCF analyses?**

5 A. The DCF rates resulting from the analysis of the proxy group falls into a wide range
6 between 7.4 percent and 8.7 percent. The highest DCF rates are 8.7 percent. I believe a
7 8.7 percent represents the current DCF-derived COE for the proxy group. I recommend a
8 cost of equity of 8.7 percent for Chaparral City, which focuses on the upper portion of the
9 DCF range.

10
11 **IX. CAPM ANALYSIS**

12 **Q. Please describe the theory and methodological basis of the CAPM.**

13 A. CAPM, was developed in the 1960s and 1970s as an extension of modern portfolio
14 theory (MPT), which studies the relationships among risk, diversification, and expected
15 returns. The CAPM describes and measures the relationship between a security's
16 investment risk and its market rate of return.

17
18 **Q. How is the CAPM derived?**

19 A. The general form of the CAPM is:

$$K = R_f + \beta(R_m - R_f)$$

20
21
22 where: K = cost of equity

23 R_f = risk free rate

24 R_m = return on market

25 β = beta

26 $R_m - R_f$ = market risk premium
27

28 The CAPM is a variant of the RP method. I believe the CAPM is generally superior to
29 the simple RP method because the CAPM specifically recognizes the risk of a particular

1 company or industry (*i.e.*, beta), whereas the simple RP method assumes the same COE
2 for all companies exhibiting similar bond ratings or other characteristics.

3
4 **Q. What do you use for the risk-free rate?**

5 A. The first input of the CAPM is the risk-free rate (R_f). The risk-free rate reflects the level
6 of return that can be achieved without accepting any risk.

7
8 In CAPM applications, the risk-free rate is generally recognized by use of U.S. Treasury
9 securities. Two general types of U.S. Treasury securities are often utilized as the R_f
10 component, short-term U.S. Treasury bills and long-term U.S. Treasury bonds.

11
12 I have performed CAPM calculations using the three-month average yield (September-
13 November 2013) for 20-year U.S. Treasury bonds. I use the yields on long-term
14 Treasury bonds since this matches the long-term perspective of COE analyses. Over this
15 three-month period, these bonds had an average yield of 3.47 percent.

16
17 **Q. What is beta and what betas do you employ in your CAPM?**

18 A. Beta is a measure of the relative volatility (and thus risk) of a particular stock in relation
19 to the overall market. Betas less than 1 are considered less risky than the market,
20 whereas betas greater than 1 are more risky. Utility stocks traditionally have had betas
21 below 1. I utilize the most recent Value Line betas for each company in my proxy group.

22
23 **Q. How do you estimate the market risk premium component?**

24 A. The market risk premium component ($R_m - R_f$) represents the investor-expected premium
25 of common stocks over the risk-free rate, or government bonds. For the purpose of
26 estimating the market risk premium, I considered alternative measures of returns of the
27 S&P 500 (a broad-based group of large U.S. companies) and 20-year U.S. Treasury
28 bonds.

1 First, I compared the actual annual returns on equity of the S&P 500 with the actual
2 annual yields of U.S. Treasury bonds. Schedule 6 shows the return on equity for the S&P
3 500 group for the period 1978-2012 (all available years reported by S&P). This schedule
4 also indicates the annual yields on 20-year U.S. Treasury bonds and the annual
5 differentials (*i.e.* risk premiums) between the S&P 500 and U.S. Treasury 20-year bonds.
6 Based upon these returns, I conclude that the risk premium from this analysis is 6.6
7 percent.

8
9 I next considered the total returns (*i.e.* dividends/interest plus capital gains/losses) for the
10 S&P 500 group as well as for long-term government bonds, as tabulated by Morningstar
11 (formerly Ibbotson Associates), using both arithmetic and geometric means. I considered
12 the total returns for the entire 1926-2012 period, which are as follows:

| | <u>S&P 500</u> | <u>L-T Gov't Bonds</u> | <u>Risk Premium</u> |
|------------|--------------------|------------------------|---------------------|
| Arithmetic | 11.8% | 6.1% | 5.7% |
| Geometric | 9.8% | 5.7% | 4.1% |

13
14
15
16
17 I conclude from this analysis that the expected risk premium is about 5.47 percent (*i.e.*
18 average of all three risk premiums: 6.6 percent from Schedule 6; 5.7 percent arithmetic
19 and 4.1 percent geometric from Morningstar). I believe that a combination of arithmetic
20 and geometric means is appropriate since investors have access to both types of means
21 and presumably, both types are reflected in investment decisions and thus, stock prices
22 and the cost of capital.

23
24 **Q. What are your CAPM results?**

25 **A.** Schedule 7 shows my CAPM calculations. The results are:

| | <u>Mean</u> | <u>Median</u> |
|------------------------|-------------|---------------|
| Value Line Water Group | 7.2% | 7.3% |

26
27
28
29 **Q. What is your conclusion concerning the CAPM COE?**

1 A. The CAPM results collectively indicate a COE of 7.2 percent to 7.3 percent for the group
2 of proxy utilities. I conclude that an appropriate COE estimation for Chaparral City is
3 7.25 percent.
4

5 **X. CE ANALYSIS**

6 **Q. Please describe the basis of the CE methodology.**

7 A. The CE method is derived from the "corresponding risk" concept discussed in the
8 Bluefield and Hope cases. This method is thus based upon the economic concept of
9 opportunity cost. As previously noted, the cost of capital is an opportunity cost: the
10 prospective return available to investors from alternative investments of similar risk.
11

12 The CE method is designed to measure the returns expected to be earned on the original
13 cost book value of similar risk enterprises. Thus, it provides a direct measure of the fair
14 return, since it translates into practice the competitive principle upon which regulation
15 rests.
16

17 The CE method normally examines the experienced and/or projected returns on book
18 common equity. The logic for examining returns on book equity follows from the use of
19 original cost rate base regulation for public utilities, which uses a utility's book common
20 equity to determine the cost of capital. This cost of capital is, in turn, used as the fair rate
21 of return which is then applied (multiplied) to the book value of rate base to establish the
22 dollar level of capital costs to be recovered by the utility. This technique is thus
23 consistent with the rate base-rate of return methodology used to set utility rates.
24

25 **Q. How do you apply the CE methodology in your analysis of Chaparral City's COE?**

26 A. I apply the CE methodology by examining realized returns on equity for the group of
27 proxy companies, as well as unregulated companies, and evaluating investor acceptance
28 of these returns by reference to the resulting market-to-book ratios. In this manner it is
29 possible to assess the degree to which a given level of return equates to the cost of
30 capital. It is generally recognized for utilities that market-to-book ratios of greater than

1 one (*i.e.* 100 percent) reflect a situation where a company is able to attract new equity
2 capital without dilution (*i.e.* above book value). As a result, one objective of a fair cost
3 of equity is the maintenance of stock prices at or above book value. There is no
4 regulatory obligation to set rates designed to maintain a market-to-book ratio
5 significantly above one.

6
7 I further note that my CE analysis is based upon market data (through the use of market-
8 to-book ratios) and is thus essentially a market test. As a result, my CE analysis is not
9 subject to the criticisms occasionally made by some who maintain that past earned
10 returns do not represent the cost of capital. In addition, my CE analysis also uses
11 prospective returns and thus is not backward looking.

12
13 **Q. What time periods do you examine in your CE analysis?**

14 A. My CE analysis considers the experienced equity returns of the proxy group of utilities
15 for the period 1992-2012 (*i.e.* the last twenty-one years). The CE analysis requires that I
16 examine a relatively long period of time in order to determine trends in earnings over at
17 least a full business cycle. Further, in estimating a fair level of return for a future period,
18 it is important to examine earnings over a diverse period of time in order to avoid any
19 undue influence from unusual or abnormal conditions that may occur in a single year or
20 shorter period. Therefore, in forming my judgment of the current cost of equity, I
21 focused on three periods: 2009-2012 (the current business cycle), 2002-2008 (the most
22 recent business cycle) and 1992-2001 (the previous business cycle). I have also
23 considered projected returns on equity for 2013, 2014 and 2016-2018.

24
25 **Q. Please describe your CE analysis.**

26 A. Schedules 8 and 9 contain summaries of experienced returns on equity for two groups of
27 companies, while Schedule 10 presents a risk comparison of utilities versus unregulated
28 firms.

Schedule 8 shows the earned returns on average common equity and market-to-book ratios for the group of proxy utilities. These can be summarized as follows:

| | <u>Value Line Water Group</u> |
|-----------------|-----------------------------------|
| Historic ROE | |
| Mean | 9.5-11.1% |
| Median | 9.2-10.9% |
| Historic M/B | |
| Mean | 178-232% |
| Median | 173-219% |
| Prospective ROE | |
| Mean | 9.3-9.9% |
| Median | 8.8-9.5% |

These results indicate that historic returns of 9.2 percent to 11.1 percent have been adequate to produce market-to-book ratios of 173 percent to 232 percent for the group of utilities. Furthermore, projected returns on equity for 2013, 2014 and 2016-2018 are within a range of 8.8 percent to 9.9 percent for the utility group. These relate to 2012 market-to-book ratios of 170 percent or greater.

Q. Do you also review the earnings of unregulated firms?

A. Yes. As an alternative, I also examine the Standard & Poor's 500 Composite group. This is a well recognized group of firms that is widely utilized in the investment community and is indicative of the competitive sector of the economy. Schedule 9 presents the earned returns on equity and market-to-book ratios for the S&P 500 group over the past twenty years (i.e., 1992-2012). As this exhibit indicates, over the three business cycle periods, this group's average earned returns ranged from 12.4 percent to 14.7 percent, with average market-to-book ratios ranging between 204 percent and 341 percent.

Q. How can the above information be used to estimate Chaparral City's COE?

A. The recent earnings of the proxy utilities and S&P 500 groups can be viewed as an indication of the level of return realized and expected in the regulated and competitive sectors of the economy. In order to apply these returns to the COE for the proxy utilities,

1 however, it is necessary to compare the risk levels of the water utilities and the
2 competitive companies. I do this in Schedule 10, which compares several risk indicators
3 for the S&P 500 group and the water utility group. The information in Schedule 10
4 indicates that the S&P 500 group is more risky than the water utility proxy group.
5

6 **Q. What COE is indicated by your CE analysis?**

7 A. Based on recent earnings and market-to-book ratios, my CE analysis indicates that the
8 COE for the proxy utilities is no more than 9.0 percent to 10.0 percent. Recent returns of
9 9.2 percent to 11.1 percent have resulted in market-to-book ratios more than 170 percent.
10 Prospective returns of 8.8 percent to 9.9 percent have been accompanied by market-to-
11 book ratios over 170 percent. As a result, it is apparent that authorized returns below this
12 level would continue to result in market-to-book ratios of well above 100 percent. An
13 earned return of 9.0 percent to 10.0 percent should thus result in a market-to-book ratio
14 well above 100 percent. As I indicated earlier, the fact that market-to-book ratios
15 substantially exceed 100 percent indicates that historic and prospective returns of over
16 10.0 percent reflect earnings levels that are well above the actual cost of equity for those
17 regulated companies. I also note that a company whose stock sells above book value can
18 attract capital in a way that enhances the book value of existing stockholders, thus
19 creating a favorable environment for financial integrity. Finally, I note that my 9.0
20 percent to 10.0 percent CE finding does not incorporate any market-to-book
21 “adjustments,” as it matches the projected returns on equity for the proxy group.
22

23 **XI. RETURN ON EQUITY RECOMMENDATION**

24 **Q. Please summarize the results of your three COE analyses.**

25 A. My three COE analyses produce the following:

| | | |
|-------------------------|-----------|-------------------|
| 26 DCF | 8.7% | |
| 27 CAPM | 7.2-7.3% | (7.25% mid-point) |
| 28 CE | 9.0-10.0% | (9.5% mid-point) |

29

1 These results indicate an overall broad range of 7.2 percent to 10.0 percent, which
2 focuses on the respective ranges of my individual model results. Focusing on the
3 respective midpoints, the range is 7.25 percent to 9.5 percent. I recommend a COE range
4 of 8.7 percent to 10.0 percent for Chaparral City. This range includes my DCF result (8.7
5 percent), and my CE upper-end (10.0 percent). For the purposes of this proceeding, I
6 recommend the average of mid-point values, which is 9.35 percent.

7
8 **Q. It appears that your CAPM results are less than your DCF and CE results. Does**
9 **this imply that the CAPM results should not be considered in determining the cost**
10 **of equity for Chaparral City?**

11 **A.** No. It is apparent that the CAPM results are less than the DCF and CE results. There are
12 two reasons for the lower CAPM results. First, risk premiums are lower currently than
13 was the case in prior years. This is the result of lower equity returns that have been
14 experienced over the past several years. This is also reflective of a decline in investor
15 expectations of equity returns and risk premiums. Second, the level of interest rates on
16 U.S. Treasury bonds (i.e., the risk free rate) has been lower in recent years. This is
17 partially the result of the actions of the Federal Reserve System to stimulate the economy.
18 This also impacts investor expectations of returns in a negative fashion. I note that,
19 initially, investors may have believed that the decline in Treasury yields was a temporary
20 factor that would soon be replaced by a rise in interest rates. However, this has not been
21 the case as interest rates have remained low and continued to decline for the past four-
22 plus years. The Federal Reserve has further announced its intention to continue stimulus
23 (and maintain low interest rates) through at least 2014. As a result, it cannot be
24 maintained that low interest rates (and low CAPM results) are temporary and do not
25 reflect investor expectations. Consequently, the CAPM results should be considered as
26 one factor in determining the cost of equity for Chaparral City.

27
28 **XII. TOTAL COST OF CAPITAL**

29 **Q. What is the total cost of capital for Chaparral City?**

1 A. Schedule 1 reflects the total cost of capital for Chaparral City using the proposed capital
2 structure and embedded cost of debt, as well as my COE recommendations. The
3 resulting total cost of capital is a range of 8.17 percent to 9.23 percent. I recommend a
4 8.70 percent total cost of capital for Chaparral City.

5
6 **XIII. COMMENTS ON COMPANY TESTIMONY**

7 **Q. What cost of capital has Chaparral City requested in its Application?**

8 A. The Company's filing requests a total cost of capital of 10.21 percent, which incorporates
9 a COE of 11.05 percent. The 11.05 percent requested COE is developed in the testimony
10 of Chaparral City witness Pauline M. Ahern.

11
12 **Q. How does she derive her COE recommendation?**

13 A. Ms. Ahern performs the following cost of equity analyses and derives the indicated
14 results:

| | Ahern Group of Nine AUS Water Utility Companies |
|---------------------------------|---|
| DCF Model | 8.84% |
| Risk Premium Model | 11.04% |
| CAPM | 10.75% |
| Indicated Median Cost of Equity | 10.48% |
| Financial Risk Adjustment | 0.18% |
| Business Risk Adjustment | 0.40% |
| Indicated COE | 11.06% |
| Recommended Cost of Equity | 11.05% |

20
21
22
23
24 Her recommendation for Chaparral City is 11.05 percent.

25
26 **Q. Do you have any disagreements with any or all of Ms. Ahern's methodologies and
27 recommendations?**

28 A. Yes. I have disagreements with several of her cost of equity methodologies and
29 conclusions, as well as her proposed 0.18 percent "financial risk adjustment" and 0.40
30 percent "business risk adjustment" for Chaparral City.

1 **Q. Please begin with her DCF model and conclusions.**

2 A. Ms. Ahern's 8.84 percent DCF conclusion is shown on Exhibit PMA-1, Schedule 6. This
3 is similar to my DCF results.
4

5 **Q. Please describe Ms. Ahern's risk premium methodology and conclusions.**

6 A. Ms. Ahern performs two types of risk premium analyses. First, she employs a Predictive
7 Risk Premium ModelTM ("PRPMTM") which produces a 11.52 percent cost of equity.
8 Second, she develops her Adjusted Market Approach risk premium methodology to
9 arrive at a risk premium cost of equity of 9.61 percent. Her risk premium method
10 conclusion and recommendation is 11.04 percent (Exhibit PMA-1, Schedule 8).
11

12 **Q. What is Ms. Ahern's first risk premium methodology?**

13 A. Ms. Ahern first performs a relatively new type of risk premium approach, which is her
14 PRPMTM approach. This approach is new and untried. Significantly, the result of this
15 methodology is a 11.52 percent cost of equity conclusion, which greatly exceeds (i.e.,
16 nearly 200 basis points) the results of her Adjusted Market Approach risk premium
17 approach. She gives equal weight to the Adjusted Market Approach and the PRPMTM
18 approach to arrive at her 11.04 percent risk premium method (Exhibit PMA-1, Schedule
19 8). I again note that, not only does her PRPMTM approach produce a much higher cost of
20 equity result, the approach is also a component in her Adjustment Market Approach
21 methodologies and has the effect of raising the results of these methodologies.
22

23 **Q. Do you agree with her Adjusted Market Approach methodology and conclusions?**

24 A. No, I do not. I primarily disagree with the average equity risk premium level of 5.16
25 percent she employs in her Adjusted Market Approach. Ms. Ahern uses two studies to
26 derive her 5.16 percent Adjusted Market Approach risk premium and averages the two
27 results to arrive at her results. First, she compares total returns for the S&P 500 Index
28 over the 1926-2012 period with arithmetic returns on Aaa and Aa-rated corporate bonds
29 (5.60 percent risk premium) as well as the PRPMTM over the same period (9.08 percent
30 risk premium). She also uses projected total returns on stocks versus prospective yields

1 on corporate bonds (9.94 percent). These produce an average risk premium of 8.21
2 percent. She then multiplies the 8.21 percent average risk premium by the 0.70 average
3 beta of her proxy group (in a CAPM context) to develop a 5.75 percent equity risk
4 premium (Exhibit PMA-1, Schedule 8, page 8).

5
6 There are several problems with her methodologies. Her use of total stock returns over
7 the 1926-2012 period, in connection with bond yields over the same long period, seems
8 to imply that investors in 2013 expect such relationships to be the same. There is no
9 demonstration that current investors expect such relationships to exist at the current time.
10 Her methodology is also a mis-match since it compares holding period returns (i.e.,
11 capital gains/losses plus income) with yields on bonds (i.e., only income return). In
12 addition, the 1926-2012 period was heavily influenced by the Great Depression, World
13 War II, the high inflation/interest rate environment of the 1970s/1980s, etc. Such factors
14 are not prevalent currently have the effect of inflating risk premiums over those expected
15 by investors. I believe Ms. Ahern's analyses over-state the required risk premiums at the
16 present time. In addition, I find it inconsistent on her part to defend use of historic data
17 going back to 1926 in her risk premium and CAPM analyses, and to then ignore historic
18 data in her DCF analyses. I do not see how an investor would place equal weight
19 between returns in 1926 and 2013 in one type of analysis (i.e., risk premium and CAPM)
20 and then give no weight whatsoever to recent (i.e., 5 years) experience in DCF analysis. I
21 also disagree with Ms. Ahern's use of projected equity returns, which are largely
22 dependent on assumed stock market values. This is speculative.

23
24 **Q. Please describe Ms. Ahern's CAPM analyses.**

25 **A.** Ms. Ahern performs two sets of CAPM analyses. Her CAPM is a "traditional" CAPM,
26 where she concludes that 10.75 percent is the CAPM cost. This uses a risk free rate of
27 4.27 percent (projected yield on 30-year U.S. Treasury bonds), Value Line beta and a risk
28 premium of 8.78 percent. I note that current 30-year Treasury bonds have recently
29 yielded below 4.27 percent, which indicates that her prospective yield is excessive.

1 I also disagree with the 8.78 percent market risk premium Ms. Ahern employs in her
2 CAPM analyses. This market risk premium is developed in a similar fashion to those in
3 his risk premium analyses. For the same reasons cited above, Ms. Ahern's risk premium
4 values are over-stated.

5
6 Ms. Ahern also performs an "empirical" CAPM analysis, wherein she assigns 75 percent
7 weight to actual betas for the proxy groups of gas utilities and a 25 percent weight to an
8 assumed beta of 1.0 (i.e., the market beta). I disagree with this empirical CAPM.

9
10 **Q. Ms. Ahern concludes that the "indicated cost of equity" for her proxy group is 10.48**
11 **percent, which she increases by some 0.18 percent to reflect her perception of a**
12 **required "financial risk adjustment" for Chaparral City. What is your response to**
13 **this proposed adjustment?**

14 **A.** I disagree with Ms. Ahern's proposed financial risk adjustment for Chaparral City. She
15 makes this financial risk, or credit risk, adjustment due to her perception that Chaparral
16 City's parent (EPCOR Utilities) has a BBB+ credit rating by S&P, which is slightly
17 lower than the average credit rating of the proxy water utilities. Her proposed 0.18
18 percent financial risk adjustment reflects her estimate of the differential yield between a
19 BBB+ and A-rated utilities. This adjustment is not warranted. What Ms. Ahern does not
20 consider in this comparison is the 83.4 percent common equity ratio in Chaparral City's
21 requested capital structure, which is much greater than the 48 percent average equity ratio
22 of the proxy group (see my Schedule 4). Ms. Ahern routinely proposes cost of equity
23 adjustments for water utilities whose capital structures contain less common equity than
24 the proxy group of water utilities whose capital structures contain less common equity
25 than the proxy group of water utilities. In the current proceeding, involving a utility with
26 a much higher common equity ratio, she is silent.

27
28 **Q. Ms. Ahern also proposes, on pages 44-46, a business risk adjustment for Chaparral**
29 **City. Do you agree with this adjustment?**

1 A. No, I do not. Ms. Ahern is maintaining that, since Chaparral City's operations are
2 smaller than her proxy group, the Company's cost of equity should be higher than that for
3 the proxy group.

4
5 I do not believe that Ms. Ahern's proposed financial risk adjustment is warranted. As I
6 noted previously, Chaparral City does not raise its own equity capital.

7
8 **Q. Does this conclude your Direct Testimony?**

9 A. Yes, it does.

BACKGROUND AND EXPERIENCE PROFILE**DAVID C. PARCELL, MBA, CRRA
PRESIDENT/SENIOR ECONOMIST****EDUCATION**

| | |
|------|---|
| 1985 | M.B.A., Virginia Commonwealth University |
| 1970 | M.A., Economics, Virginia Polytechnic Institute and State University, (Virginia Tech) |
| 1969 | B.A., Economics, Virginia Polytechnic Institute and State University, (Virginia Tech) |

POSITIONS

| | |
|--------------|--|
| 2007-Present | President, Technical Associates, Inc. |
| 1995-2007 | Executive Vice President and Senior Economist, Technical Associates, Inc. |
| 1993-1995 | Vice President and Senior Economist, C. W. Amos of Virginia |
| 1972-1993 | Vice President and Senior Economist, Technical Associates, Inc. |
| 1969-1972 | Research Economist, Technical Associates, Inc. |
| 1968-1969 | Research Associate, Department of Economics, Virginia Polytechnic Institute and State University |

ACADEMIC HONORS

Omicron Delta Epsilon - Honor Society in Economics
Beta Gamma Sigma - National Scholastic Honor Society of Business Administration
Alpha Iota Delta - National Decision Sciences Honorary Society
Phi Kappa Phi - Scholastic Honor Society

PROFESSIONAL DESIGNATION

Certified Rate of Return Analyst - Founding Member

RELEVANT EXPERIENCE

Financial Economics -- Advised and assisted many Virginia banks and savings and loan associations on organizational and regulatory matters. Testified approximately 25 times before the Virginia State Corporation Commission and the Regional Administrator of

National Banks on matters related to branching and organization for banks, savings and loan associations, and consumer finance companies. Advised financial institutions on interest rate structure and loan maturity. Testified before Virginia State Corporation Commission on maximum rates for consumer finance companies.

Testified before several committees and subcommittees of Virginia General Assembly on numerous banking matters.

Clients have included First National Bank of Rocky Mount, Patrick Henry National Bank, Peoples Bank of Danville, Blue Ridge Bank, Bank of Essex, and Signet Bank.

Published articles in law reviews and other periodicals on structure and regulation of banking/financial services industry.

Utility Economics -- Performed numerous financial studies of regulated public utilities. Testified in over 300 cases before some thirty state and federal regulatory agencies.

Prepared numerous rate of return studies incorporating cost of equity determination based on DCF, CAPM, comparable earnings and other models. Developed procedures for identifying differential risk characteristics by nuclear construction and other factors.

Conducted studies with respect to cost of service and indexing for determining utility rates, the development of annual review procedures for regulatory control of utilities, fuel and power plant cost recovery adjustment clauses, power supply agreements among affiliates, utility franchise fees, and use of short-term debt in capital structure.

Presented expert testimony before federal regulatory agencies Federal Energy Regulatory Commission, Federal Power Commission, and National Energy Board (Canada), state regulatory agencies in Alabama, Alaska, Arizona, Arkansas, California, Connecticut, Delaware, District of Columbia, Florida, Georgia, Hawaii, Illinois, Indiana, Kansas, Kentucky, Maine, Maryland, Missouri, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, Ohio, Oklahoma, Ontario (Canada), Pennsylvania, South Carolina, Texas, Utah, Vermont, Virginia, West Virginia, Washington, Wisconsin, and Yukon Territory (Canada).

Published articles in law reviews and other periodicals on the theory and purpose of regulation and other regulatory subjects.

Clients served include state regulatory agencies in Alaska, Arizona, Delaware, Missouri, North Carolina, Ontario (Canada), and Virginia; consumer advocates and attorneys general in Alabama, Arizona, District of Columbia, Florida, Georgia, Hawaii, Illinois,

Indiana, Kansas, Kentucky, Maryland, Nevada, New Mexico, Ohio, Oklahoma, Pennsylvania, South Carolina, Texas, Utah, Vermont, Virginia, and West Virginia; federal agencies including Defense Communications Agency, the Department of Energy, Department of the Navy, and General Services Administration; and various organizations such as Bath Iron Works, Illinois Citizens' Utility Board, Illinois Governor's Office of Consumer Services, Illinois Small Business Utility Advocate, Wisconsin's Environmental Decade, Wisconsin's Citizens Utility Board, and Old Dominion Electric Cooperative.

Insurance Economics -- Conducted analyses of the relationship between the investment income earned by insurance companies on their portfolios and the premiums charged for insurance. Analyzed impact of diversification on financial strength of Blue Cross/Blue Shield Plans in Virginia.

Conducted studies of profitability and cost of capital for property/casualty insurance industry. Evaluated risk of and required return on surplus for various lines of insurance business.

Presented expert testimony before Virginia State Corporation Commission concerning cost of capital and expected gains from investment portfolio. Testified before insurance bureaus of Maine, New Jersey, North Carolina, Rhode Island, South Carolina and Vermont concerning cost of equity for insurance companies.

Prepared cost of capital and investment income return analyses for numerous insurance companies concerning several lines of insurance business. Analyses used by Virginia Bureau of Insurance for purposes of setting rates.

Special Studies -- Conducted analyses which evaluated the financial and economic implications of legislative and administrative changes. Subject matter of analyses include returnable bottles, retail beer sales, wine sales regulations, taxi-cab taxation, and bank regulation. Testified before several Virginia General Assembly subcommittees.

Testified before Virginia ABC Commission concerning economic impact of mixed beverage license.

Clients include Virginia Beer Wholesalers, Wine Institute, Virginia Retail Merchants Association, and Virginia Taxicab Association.

Franchise, Merger & Anti-Trust Economics -- Conducted studies on competitive impact on market structures due to joint ventures, mergers, franchising and other business restructuring. Analyzed the costs and benefits to parties involved in mergers. Testified

in federal courts and before banking and other regulatory bodies concerning the structure and performance of markets, as well as on the impact of restrictive practices.

Clients served include Dominion Bankshares, asphalt contractors, and law firms.

Transportation Economics -- Conducted cost of capital studies to assess profitability of oil pipelines, trucks, taxicabs and railroads. Analyses have been presented before the Federal Energy Regulatory Commission and Alaska Pipeline Commission in rate proceedings. Served as a consultant to the Rail Services Planning Office on the reorganization of rail services in the U.S.

Economic Loss Analyses -- Testified in federal courts, state courts, and other adjudicative forums regarding the economic loss sustained through personal and business injury whether due to bodily harm, discrimination, non-performance, or anticompetitive practices. Testified on economic loss to a commercial bank resulting from publication of adverse information concerning solvency. Testimony has been presented on behalf of private individuals and business firms.

MEMBERSHIPS

American Economic Association
Virginia Association of Economists
Richmond Society of Financial Analysts
Financial Analysts Federation
Society of Utility and Regulatory Financial Analysts
 Board of Directors 1992-2000
 Secretary/Treasurer 1994-1998
 President 1998-2000

RESEARCH ACTIVITY

Books and Major Research Reports

"Stock Price As An Indicator of Performance," Master of Arts Thesis, Virginia Tech, 1970

"Revision of the Property and Casualty Insurance Ratemaking Process Under Prior Approval in the Commonwealth of Virginia," prepared for the Bureau of Insurance of the Virginia State Corporation Commission, with Charles Schotta and Michael J. Ileo, 1971

"An analysis of the Virginia Consumer Finance Industry to Determine the Need for Restructuring the Rate and Size Ceilings on Small Loans in Virginia and the Process by which They are Governed," prepared for the Virginia Consumer Finance Association, with Michael J. Ileo, 1973

State Banks and the State Corporation Commission: A Historical Review, Technical Associates, Inc., 1974

"A Study of the Implications of the Sale of Wine by the Virginia Department of Alcoholic Beverage Control", prepared for the Virginia Wine Wholesalers Association, Virginia Retail Merchants Association, Virginia Food Dealers Association, Virginia Association of Chain Drugstores, Southland Corporation, and the Wine Institute, 1983.

"Performance and Diversification of the Blue Cross/Blue Shield Plans in Virginia: An Operational Review", prepared for the Bureau of Insurance of the Virginia State Corporation Commission, with Michael J. Ileo and Alexander F. Skirpan, 1988.

The Cost of Capital - A Practitioners' Guide, Society of Utility and Regulatory Financial Analysts, 1997 (previous editions in 1991, 1992, 1993, 1994, and 1995).

Papers Presented and Articles Published

"The Differential Effect of Bank Structure on the Transmission of Open Market Operations," Western Economic Association Meeting, with Charles Schotta, 1971

"The Economic Objectives of Regulation: The Trend in Virginia," (with Michael J. Ileo), William and Mary Law Review, Vol. 14, No. 2, 1973

"Evolution of the Virginia Banking Structure, 1962-1974: The Effects of the Buck-Holland Bill", (with Michael J. Ileo), William and Mary Law Review, Vol. 16, No. 3, 1975

"Banking Structure and Statewide Branching: The Potential for Virginia", William and Mary Law Review, Vol. 18, No. 1, 1976

"Bank Expansion and Electronic Banking: Virginia Banking Structure Changes Past, Present, and Future," William and Mary Business Review, Vol. 1, No. 2, 1976

"Electronic Banking - Wave of the Future?" (with James R. Marchand), Journal of Management and Business Consulting, Vol. 1, No. 1, 1976

"The Pricing of Electricity" (with James R. Marchand), Journal of Management and Business Consulting, Vol. 1, No. 2, 1976

"The Public Interest - Bank and Savings and Loan Expansion in Virginia" (with Richard D. Rogers), University of Richmond Law Review, Vol. 11, No. 3, 1977

"When Is It In the 'Public Interest' to Authorize a New Bank?", University of Richmond Law Review, Vol. 13, No. 3, 1979

"Banking Deregulation and Its Implications on the Virginia Banking Structure," William and Mary Business Review, Vol. 5, No. 1, 1983

"The Impact of Reciprocal Interstate Banking Statutes on The Performance of Virginia Bank Stocks", with William B. Harrison, Virginia Social Science Journal, Vol. 23, 1988

"The Financial Performance of New Banks in Virginia", Virginia Social Science Journal, Vol. 24, 1989

"Identifying and Managing Community Bank Performance After Deregulation", with William B. Harrison, Journal of Managerial Issues, Vol. II, No. 2, Summer 1990

"The Flotation Cost Adjustment To Utility Cost of Common Equity - Theory, Measurement and Implementation," presented at Twenty-Fifth Financial Forum, National Society of Rate of Return Analysts, Philadelphia, Pennsylvania, April 28, 1993.

Biography of Myon Edison Bristow, Dictionary of Virginia Biography, Volume 2, 2001.

**CHAPARRAL CITY WATER COMPANY
TOTAL COST OF CAPITAL
AS OF END OF TEST PERIOD**

| Item | Amount 1/ | Percent | Cost | | | Weighted Cost | | |
|-----------------|--------------|---------|-------|-------|--------|---------------|-------|-------|
| Long-Term Debt | \$4,935,000 | 17.68% | 5.92% | 1/ | | 1.05% | | |
| Short-Term Debt | \$135,057 | 0.48% | 0.72% | 1/ | | 0.00% | | |
| Common Equity | \$22,837,590 | 81.83% | 8.70% | 9.35% | 10.00% | 7.12% | 7.65% | 8.18% |
| Total | \$27,907,647 | 100.00% | | | | 8.17% | 8.70% | 9.23% |

1/ Percentages of long-term debt and common equity, as well as cost of long-term debt, as contained in Company filing.

ECONOMIC INDICATORS

| Year | Real GDP* Growth | Industrial Production Growth | Unemploy- ment Rate | Consumer Price Index | Producer Price Index |
|--------------------------|------------------------|------------------------------------|---------------------------|-------------------------|-------------------------|
| 1975 - 1982 Cycle | | | | | |
| 1975 | -1.1% | -8.9% | 8.5% | 7.0% | 6.6% |
| 1976 | 5.4% | 10.8% | 7.7% | 4.8% | 3.7% |
| 1977 | 5.5% | 5.9% | 7.0% | 6.8% | 6.9% |
| 1978 | 5.0% | 5.7% | 6.0% | 9.0% | 9.2% |
| 1979 | 2.8% | 4.4% | 5.8% | 13.3% | 12.8% |
| 1980 | -0.2% | -1.9% | 7.0% | 12.4% | 11.8% |
| 1981 | 1.8% | 1.9% | 7.5% | 8.9% | 7.1% |
| 1982 | -2.1% | -4.4% | 9.5% | 3.8% | 3.6% |
| 1983 - 1991 Cycle | | | | | |
| 1983 | 4.0% | 3.7% | 9.5% | 3.8% | 0.6% |
| 1984 | 6.8% | 9.3% | 7.5% | 3.9% | 1.7% |
| 1985 | 3.7% | 1.7% | 7.2% | 3.8% | 1.8% |
| 1986 | 3.1% | 0.9% | 7.0% | 1.1% | -2.3% |
| 1987 | 2.9% | 4.9% | 6.2% | 4.4% | 2.2% |
| 1988 | 3.8% | 4.5% | 5.5% | 4.4% | 4.0% |
| 1989 | 3.5% | 1.8% | 5.3% | 4.6% | 4.9% |
| 1990 | 1.8% | -0.2% | 5.6% | 6.1% | 5.7% |
| 1991 | -0.5% | -2.0% | 6.8% | 3.1% | -0.1% |
| 1992 - 2001 Cycle | | | | | |
| 1992 | 3.0% | 3.1% | 7.5% | 2.9% | 1.6% |
| 1993 | 2.7% | 3.4% | 6.9% | 2.7% | 0.2% |
| 1994 | 4.0% | 5.5% | 6.1% | 2.7% | 1.7% |
| 1995 | 3.7% | 4.8% | 5.6% | 2.5% | 2.3% |
| 1996 | 4.5% | 4.3% | 5.4% | 3.3% | 2.8% |
| 1997 | 4.5% | 7.3% | 4.9% | 1.7% | -1.2% |
| 1998 | 4.2% | 5.8% | 4.5% | 1.6% | 0.0% |
| 1999 | 3.7% | 4.5% | 4.2% | 2.7% | 2.9% |
| 2000 | 4.1% | 4.0% | 4.0% | 3.4% | 3.6% |
| 2001 | 1.1% | -3.4% | 4.7% | 1.6% | -1.6% |
| 2002 - 2009 Cycle | | | | | |
| 2002 | 1.8% | 0.2% | 5.8% | 2.4% | 1.2% |
| 2003 | 2.8% | 1.2% | 6.0% | 1.9% | 4.0% |
| 2004 | 3.8% | 2.3% | 5.5% | 3.3% | 4.2% |
| 2005 | 3.4% | 3.2% | 5.1% | 3.4% | 5.4% |
| 2006 | 2.7% | 2.2% | 4.6% | 2.5% | 1.1% |
| 2007 | 1.8% | 2.5% | 4.6% | 4.1% | 6.2% |
| 2008 | -0.3% | -3.4% | 5.8% | 0.1% | -0.9% |
| 2009 | -2.8% | -11.3% | 9.3% | 2.7% | 4.3% |
| Current Cycle | | | | | |
| 2010 | 2.5% | 5.7% | 9.6% | 1.5% | 3.8% |
| 2011 | 1.8% | 3.4% | 8.9% | 3.0% | 4.7% |
| 2012 | 2.8% | 3.6% | 8.1% | 1.7% | 1.4% |

*GDP=Gross Domestic Product

Source: Council of Economic Advisors, Economic Indicators, various issues.

ECONOMIC INDICATORS

| Year | Real GDP* Growth | Industrial Production Growth | Unemploy- ment Rate | Consumer Price Index | Producer Price Index |
|-------------|------------------------|------------------------------------|---------------------------|-------------------------|-------------------------|
| 2002 | | | | | |
| 1st Qtr. | 2.7% | -3.8% | 5.6% | 2.8% | 4.4% |
| 2nd Qtr. | 2.2% | -1.2% | 5.9% | 0.9% | -2.0% |
| 3rd Qtr. | 2.4% | 0.8% | 5.8% | 2.4% | 1.2% |
| 4th Qtr. | 0.2% | 1.4% | 5.9% | 1.6% | 0.4% |
| 2003 | | | | | |
| 1st Qtr. | 1.2% | 1.1% | 5.8% | 4.8% | 5.6% |
| 2nd Qtr. | 3.5% | -0.9% | 6.2% | 0.0% | -0.5% |
| 3rd Qtr. | 7.5% | -0.9% | 6.1% | 3.2% | 3.2% |
| 4th Qtr. | 2.7% | 1.5% | 5.9% | -0.3% | 2.8% |
| 2004 | | | | | |
| 1st Qtr. | 3.0% | 2.8% | 5.6% | 5.2% | 5.2% |
| 2nd Qtr. | 3.5% | 4.9% | 5.6% | 4.4% | 4.4% |
| 3rd Qtr. | 3.6% | 4.6% | 5.4% | 0.8% | 0.8% |
| 4th Qtr. | 2.5% | 4.3% | 5.4% | 3.6% | 7.2% |
| 2005 | | | | | |
| 1st Qtr. | 4.1% | 3.8% | 5.3% | 4.4% | 5.6% |
| 2nd Qtr. | 1.7% | 3.0% | 5.1% | 1.6% | -0.4% |
| 3rd Qtr. | 3.1% | 2.7% | 5.0% | 8.8% | 14.0% |
| 4th Qtr. | 2.1% | 2.9% | 4.9% | -2.0% | 4.0% |
| 2006 | | | | | |
| 1st Qtr. | 5.4% | 3.4% | 4.7% | 4.8% | -0.2% |
| 2nd Qtr. | 1.4% | 4.5% | 4.6% | 4.8% | 5.6% |
| 3rd Qtr. | 0.1% | 5.2% | 4.7% | 0.4% | -4.4% |
| 4th Qtr. | 3.0% | 3.5% | 4.5% | 0.0% | 3.6% |
| 2007 | | | | | |
| 1st Qtr. | 0.9% | 2.5% | 4.5% | 4.8% | 6.4% |
| 2nd Qtr. | 3.2% | 1.6% | 4.5% | 5.2% | 6.8% |
| 3rd Qtr. | 2.3% | 1.8% | 4.6% | 1.2% | 1.2% |
| 4th Qtr. | 2.9% | 1.7% | 4.8% | 6.4% | 10.8% |
| 2008 | | | | | |
| 1st Qtr. | -1.8% | 1.9% | 4.9% | 2.8% | 9.6% |
| 2nd Qtr. | 1.3% | 0.2% | 5.3% | 7.6% | 14.0% |
| 3rd Qtr. | -3.7% | -3.0% | 6.0% | 2.8% | -0.4% |
| 4th Qtr. | -8.9% | 6.0% | 6.9% | -13.2% | -28.4% |
| 2009 | | | | | |
| 1st Qtr. | -5.3% | -11.6% | 8.1% | 2.4% | -0.4% |
| 2nd Qtr. | -0.3% | -12.9% | 9.3% | 3.2% | 9.2% |
| 3rd Qtr. | 1.4% | -9.3% | 9.6% | 2.0% | -0.8% |
| 4th Qtr. | 4.0% | -4.5% | 10.0% | 2.5% | 8.8% |
| 2010 | | | | | |
| 1st Qtr. | 1.6% | 2.7% | 9.7% | 0.9% | 6.5% |
| 2nd Qtr. | 3.9% | 6.5% | 9.7% | -1.2% | -2.4% |
| 3rd Qtr. | 2.8% | 6.9% | 9.6% | 2.8% | 4.0% |
| 4th Qtr. | 2.8% | 6.2% | 9.6% | 2.8% | 9.2% |
| 2011 | | | | | |
| 1st Qtr. | -1.3% | 5.4% | 9.0% | 4.8% | 9.6% |
| 2nd Qtr. | 3.2% | 3.6% | 9.0% | 3.2% | 3.6% |
| 3rd Qtr. | 1.4% | 3.3% | 9.1% | 2.4% | 6.4% |
| 4th Qtr. | 4.9% | 4.0% | 8.7% | 0.4% | -1.2% |
| 2012 | | | | | |
| 1st Qtr. | 3.7% | 4.5% | 8.3% | 3.2% | 2.0% |
| 2nd Qtr. | 1.2% | 4.7% | 8.2% | 0.0% | -2.8% |
| 3rd Qtr. | 2.8% | 3.4% | 8.1% | 4.0% | 9.6% |
| 4th Qtr. | 0.1% | 2.8% | 7.8% | 0.0% | -3.6% |
| 2013 | | | | | |
| 1st Qtr. | 1.1% | 2.5% | 7.7% | 2.0% | 1.2% |
| 2nd Qtr. | 2.5% | 2.0% | 7.6% | 0.8% | 2.4% |
| 3rd Qtr. | 2.8% | 2.5% | 7.3% | 2.0% | 80.0% |

*GDP=Gross Domestic Product

Source: Council of Economic Advisors, Economic Indicators, various issues.

INTEREST RATES

| Year | Prime Rate | US Treasury T Bills 3 Month | US Treasury T Bonds 10 Year | Utility Bonds Aaa | Utility Bonds Aa | Utility Bonds A | Utility Bonds Baa |
|--------------------------|------------|-----------------------------|-----------------------------|-------------------|------------------|-----------------|-------------------|
| 1975 - 1982 Cycle | | | | | | | |
| 1975 | 7.86% | 5.84% | 7.99% | 9.03% | 9.44% | 10.09% | 10.96% |
| 1976 | 6.84% | 4.99% | 7.61% | 8.63% | 8.92% | 9.29% | 9.82% |
| 1977 | 6.83% | 5.27% | 7.42% | 8.19% | 8.43% | 8.61% | 9.06% |
| 1978 | 9.06% | 7.22% | 8.41% | 8.87% | 9.10% | 9.29% | 9.62% |
| 1979 | 12.67% | 10.04% | 9.44% | 9.86% | 10.22% | 10.49% | 10.96% |
| 1980 | 15.27% | 11.51% | 11.46% | 12.30% | 13.00% | 13.34% | 13.95% |
| 1981 | 18.89% | 14.03% | 13.93% | 14.64% | 15.30% | 15.95% | 16.60% |
| 1982 | 14.86% | 10.69% | 13.00% | 14.22% | 14.79% | 15.86% | 16.45% |
| 1983 - 1991 Cycle | | | | | | | |
| 1983 | 10.79% | 8.63% | 11.10% | 12.52% | 12.83% | 13.66% | 14.20% |
| 1984 | 12.04% | 9.58% | 12.44% | 12.72% | 13.66% | 14.03% | 14.53% |
| 1985 | 9.93% | 7.48% | 10.62% | 11.68% | 12.06% | 12.47% | 12.96% |
| 1986 | 8.33% | 5.98% | 7.68% | 8.92% | 9.30% | 9.58% | 10.00% |
| 1987 | 8.21% | 5.82% | 8.39% | 9.52% | 9.77% | 10.10% | 10.53% |
| 1988 | 9.32% | 6.69% | 8.85% | 10.05% | 10.26% | 10.49% | 11.00% |
| 1989 | 10.87% | 8.12% | 8.49% | 9.32% | 9.56% | 9.77% | 9.97% |
| 1990 | 10.01% | 7.51% | 8.55% | 9.45% | 9.65% | 9.86% | 10.06% |
| 1991 | 8.46% | 5.42% | 7.86% | 8.85% | 9.09% | 9.36% | 9.55% |
| 1992 - 2001 Cycle | | | | | | | |
| 1992 | 6.25% | 3.45% | 7.01% | 8.19% | 8.55% | 8.69% | 8.86% |
| 1993 | 6.00% | 3.02% | 5.87% | 7.29% | 7.44% | 7.59% | 7.91% |
| 1994 | 7.15% | 4.29% | 7.09% | 8.07% | 8.21% | 8.31% | 8.63% |
| 1995 | 8.83% | 5.51% | 6.57% | 7.68% | 7.77% | 7.89% | 8.29% |
| 1996 | 8.27% | 5.02% | 6.44% | 7.48% | 7.57% | 7.75% | 8.16% |
| 1997 | 8.44% | 5.07% | 6.35% | 7.43% | 7.54% | 7.60% | 7.95% |
| 1998 | 8.35% | 4.81% | 5.26% | 6.77% | 6.91% | 7.04% | 7.26% |
| 1999 | 8.00% | 4.66% | 5.65% | 7.21% | 7.51% | 7.62% | 7.88% |
| 2000 | 9.23% | 5.85% | 6.03% | 7.88% | 8.06% | 8.24% | 8.36% |
| 2001 | 6.91% | 3.44% | 5.02% | 7.47% | 7.59% | 7.78% | 8.02% |
| 2002 - 2009 Cycle | | | | | | | |
| 2002 | 4.67% | 1.62% | 4.61% | [1] 7.19% | 7.37% | 8.02% | |
| 2003 | 4.12% | 1.01% | 4.01% | | 6.40% | 6.58% | 6.84% |
| 2004 | 4.34% | 1.38% | 4.27% | | 6.04% | 6.16% | 6.40% |
| 2005 | 6.19% | 3.16% | 4.29% | | 5.44% | 5.65% | 5.93% |
| 2006 | 7.96% | 4.73% | 4.80% | | 5.84% | 6.07% | 6.32% |
| 2007 | 8.05% | 4.41% | 4.63% | | 5.94% | 6.07% | 6.33% |
| 2008 | 5.09% | 1.48% | 3.66% | | 6.18% | 6.53% | 7.25% |
| 2009 | 3.25% | 0.16% | 3.26% | | 5.75% | 6.04% | 7.06% |
| Current Cycle | | | | | | | |
| 2010 | 3.25% | 0.14% | 3.22% | | 5.24% | 5.46% | 5.96% |
| 2011 | 3.25% | 0.06% | 2.78% | | 4.78% | 5.04% | 5.57% |
| 2012 | 3.25% | 0.09% | 1.80% | | 3.83% | 4.13% | 4.86% |

[1] Note: Moody's has not published Aaa utility bond yields since 2001.

Sources: Council of Economic Advisors, Economic Indicators; Moody's Bond Record; Federal Reserve Bulletin; various issues.

INTEREST RATES

| | Prime Rate | US Treasury T Bills 3 Month | US Treasury T Bonds 10 Year | Utility Bonds Aaa [1] | Utility Bonds Aa | Utility Bonds A | Utility Bonds Baa |
|-------------|---------------|-----------------------------------|-----------------------------------|-----------------------------|------------------------|-----------------------|-------------------------|
| 2007 | | | | | | | |
| Jan | 8.25% | 4.96% | 4.76% | | 5.78% | 5.96% | 6.16% |
| Feb | 8.25% | 5.02% | 4.72% | | 5.73% | 5.90% | 6.10% |
| Mar | 8.25% | 4.97% | 4.56% | | 5.86% | 5.85% | 6.10% |
| Apr | 8.25% | 4.88% | 4.69% | | 5.83% | 5.97% | 6.24% |
| May | 8.25% | 4.77% | 4.75% | | 5.86% | 5.99% | 6.23% |
| June | 8.25% | 4.63% | 5.10% | | 6.18% | 6.30% | 6.54% |
| July | 8.25% | 4.84% | 5.00% | | 6.11% | 6.25% | 6.49% |
| Aug | 8.25% | 4.34% | 4.67% | | 6.11% | 6.24% | 6.51% |
| Sept | 7.75% | 4.01% | 4.52% | | 6.10% | 6.18% | 6.45% |
| Oct | 7.50% | 3.97% | 4.53% | | 6.04% | 6.11% | 6.36% |
| Nov | 7.50% | 3.49% | 4.15% | | 5.87% | 5.97% | 6.27% |
| Dec | 7.25% | 3.08% | 4.10% | | 6.03% | 6.16% | 6.51% |
| 2008 | | | | | | | |
| Jan | 6.00% | 2.86% | 3.74% | | 5.87% | 6.02% | 6.35% |
| Feb | 6.00% | 2.21% | 3.74% | | 6.04% | 6.21% | 6.60% |
| Mar | 5.25% | 1.38% | 3.51% | | 5.99% | 6.21% | 6.68% |
| Apr | 5.00% | 1.32% | 3.68% | | 5.99% | 6.29% | 6.82% |
| May | 5.00% | 1.71% | 3.88% | | 6.07% | 6.27% | 6.70% |
| June | 5.00% | 1.90% | 4.10% | | 6.19% | 6.38% | 6.93% |
| July | 5.00% | 1.72% | 4.01% | | 6.13% | 6.40% | 6.97% |
| Aug | 5.00% | 1.79% | 3.89% | | 6.09% | 6.37% | 6.98% |
| Sept | 5.00% | 1.46% | 3.69% | | 6.13% | 6.49% | 7.15% |
| Oct | 4.00% | 0.84% | 3.81% | | 6.95% | 7.56% | 8.58% |
| Nov | 4.00% | 0.30% | 3.53% | | 6.83% | 7.60% | 8.98% |
| Dec | 3.25% | 0.04% | 2.42% | | 5.93% | 6.54% | 8.13% |
| 2009 | | | | | | | |
| Jan | 3.25% | 0.12% | 2.52% | | 6.01% | 6.39% | 7.90% |
| Feb | 3.25% | 0.31% | 2.87% | | 6.11% | 6.30% | 7.74% |
| Mar | 3.25% | 0.25% | 2.82% | | 6.14% | 6.42% | 8.00% |
| Apr | 3.25% | 0.17% | 2.93% | | 6.20% | 6.48% | 8.03% |
| May | 3.25% | 0.15% | 3.29% | | 6.23% | 6.49% | 7.76% |
| June | 3.25% | 0.17% | 3.72% | | 6.13% | 6.20% | 7.30% |
| July | 3.25% | 0.19% | 3.56% | | 5.63% | 5.97% | 6.87% |
| Aug | 3.25% | 0.18% | 3.59% | | 5.33% | 5.71% | 6.36% |
| Sept | 3.25% | 0.13% | 3.40% | | 5.15% | 5.53% | 6.12% |
| Oct | 3.25% | 0.08% | 3.39% | | 5.23% | 5.55% | 6.14% |
| Nov | 3.25% | 0.05% | 3.40% | | 5.33% | 5.64% | 6.18% |
| Dec | 3.25% | 0.07% | 3.59% | | 5.52% | 5.79% | 6.26% |
| 2010 | | | | | | | |
| Jan | 3.25% | 0.06% | 3.73% | | 5.55% | 5.77% | 6.16% |
| Feb | 3.25% | 0.10% | 3.69% | | 5.69% | 5.87% | 6.25% |
| Mar | 3.25% | 0.15% | 3.73% | | 5.64% | 5.84% | 6.22% |
| Apr | 3.25% | 0.15% | 3.85% | | 5.62% | 5.81% | 6.19% |
| May | 3.25% | 0.16% | 3.42% | | 5.29% | 5.50% | 5.97% |
| June | 3.25% | 0.12% | 3.20% | | 5.22% | 5.46% | 6.18% |
| July | 3.25% | 0.16% | 3.01% | | 4.99% | 5.28% | 5.98% |
| Aug | 3.25% | 0.15% | 2.70% | | 4.75% | 5.01% | 5.55% |
| Sept | 3.25% | 0.15% | 2.65% | | 4.74% | 5.01% | 5.53% |
| Oct | 3.25% | 0.13% | 2.54% | | 4.89% | 5.10% | 5.62% |
| Nov | 3.25% | 0.13% | 2.76% | | 5.12% | 5.37% | 5.85% |
| Dec | 3.25% | 0.15% | 3.29% | | 5.32% | 5.56% | 6.04% |
| 2011 | | | | | | | |
| Jan | 3.25% | 0.15% | 3.39% | | 5.29% | 5.57% | 6.06% |
| Feb | 3.25% | 0.14% | 3.58% | | 5.42% | 5.68% | 6.10% |
| Mar | 3.25% | 0.11% | 3.41% | | 5.33% | 5.56% | 5.97% |
| Apr | 3.25% | 0.06% | 3.46% | | 5.32% | 5.55% | 5.98% |
| May | 3.25% | 0.04% | 3.17% | | 5.08% | 5.32% | 5.74% |
| June | 3.25% | 0.04% | 3.00% | | 5.04% | 5.26% | 5.67% |
| July | 3.25% | 0.03% | 3.00% | | 5.05% | 5.27% | 5.70% |
| Aug | 3.25% | 0.05% | 2.30% | | 4.44% | 4.69% | 5.22% |
| Sept | 3.25% | 0.02% | 1.98% | | 4.24% | 4.48% | 5.11% |
| Oct | 3.25% | 0.02% | 2.15% | | 4.21% | 4.52% | 5.24% |
| Nov | 3.25% | 0.01% | 2.01% | | 3.92% | 4.25% | 4.93% |
| Dec | 3.25% | 0.02% | 1.98% | | 4.00% | 4.33% | 5.07% |
| 2012 | | | | | | | |
| Jan | 3.25% | 0.02% | 1.97% | | 4.03% | 4.34% | 5.06% |
| Feb | 3.25% | 0.08% | 1.97% | | 4.02% | 4.36% | 5.02% |
| Mar | 3.25% | 0.09% | 2.17% | | 4.16% | 4.48% | 5.13% |
| Apr | 3.25% | 0.08% | 2.05% | | 4.10% | 4.40% | 5.11% |
| May | 3.25% | 0.09% | 1.80% | | 3.92% | 4.20% | 4.97% |
| June | 3.25% | 0.09% | 1.62% | | 3.79% | 4.08% | 4.91% |
| July | 3.25% | 0.10% | 1.53% | | 3.58% | 3.93% | 4.85% |
| Aug | 3.25% | 0.11% | 1.68% | | 3.85% | 4.00% | 4.88% |
| Sept | 3.25% | 0.10% | 1.72% | | 3.69% | 4.02% | 4.81% |
| Oct | 3.25% | 0.10% | 1.75% | | 3.68% | 3.91% | 4.54% |
| Nov | 3.25% | 0.11% | 1.65% | | 3.60% | 3.84% | 4.42% |
| Dec | 3.25% | 0.08% | 1.72% | | 3.75% | 4.00% | 4.56% |
| 2013 | | | | | | | |
| Jan | 3.25% | 0.07% | 1.91% | | 3.90% | 4.15% | 4.66% |
| Feb | 3.25% | 0.10% | 1.98% | | 3.95% | 4.18% | 4.74% |
| Mar | 3.25% | 0.90% | 1.96% | | 3.90% | 4.15% | 4.66% |
| Apr | 3.25% | 0.80% | 1.76% | | 3.74% | 4.00% | 4.49% |
| May | 3.25% | 0.50% | 1.93% | | 3.91% | 4.17% | 4.65% |
| June | 3.25% | 0.50% | 2.30% | | 4.27% | 4.53% | 5.08% |
| July | 3.25% | 0.40% | 2.58% | | 4.44% | 4.68% | 5.21% |
| Aug | 3.25% | 0.40% | 2.74% | | 4.53% | 4.73% | 5.28% |
| Sept | 3.25% | 0.20% | 2.81% | | 4.58% | 4.80% | 5.31% |
| Oct | 3.25% | 0.80% | 2.62% | | 4.48% | 4.70% | 5.17% |
| Nov | 3.25% | | | | 4.56% | 4.77% | 5.24% |

[1] Note: Moody's has not published Aaa utility bond yields since 2001.

Sources: Council of Economic Advisors, Economic Indicators; Moody's Bond Record; Federal Reserve Bulletin; various issues.

STOCK PRICE INDICATORS

| | S&P Composite [1] | NASDAQ Composite [1] | DJIA | S&P D/P | S&P E/P |
|--------------------------|----------------------|-------------------------|-----------|------------|------------|
| 1975 - 1982 Cycle | | | | | |
| 1975 | | | 802.49 | 4.31% | 9.15% |
| 1976 | | | 974.92 | 3.77% | 8.90% |
| 1977 | | | 894.63 | 4.62% | 10.79% |
| 1978 | | | 820.23 | 5.28% | 12.03% |
| 1979 | | | 844.40 | 5.47% | 13.46% |
| 1980 | | | 891.41 | 5.26% | 12.66% |
| 1981 | | | 932.92 | 5.20% | 11.96% |
| 1982 | | | 884.36 | 5.81% | 11.60% |
| 1983 - 1991 Cycle | | | | | |
| 1983 | | | 1,190.34 | 4.40% | 8.03% |
| 1984 | | | 1,178.48 | 4.64% | 10.02% |
| 1985 | | | 1,328.23 | 4.25% | 8.12% |
| 1986 | | | 1,792.76 | 3.49% | 6.09% |
| 1987 | | | 2,275.99 | 3.08% | 5.48% |
| 1988 | [1] | [1] | 2,060.82 | 3.64% | 8.01% |
| 1989 | 322.84 | | 2,508.91 | 3.45% | 7.41% |
| 1990 | 334.59 | | 2,678.94 | 3.61% | 6.47% |
| 1991 | 376.18 | 491.69 | 2,929.33 | 3.24% | 4.79% |
| 1992 - 2001 Cycle | | | | | |
| 1992 | 415.74 | \$599.26 | 3,284.29 | 2.99% | 4.22% |
| 1993 | 451.21 | 715.16 | 3,522.06 | 2.78% | 4.46% |
| 1994 | 460.42 | 751.65 | 3,793.77 | 2.82% | 5.83% |
| 1995 | 541.72 | 925.19 | 4,493.76 | 2.56% | 6.09% |
| 1996 | 670.50 | 1,164.96 | 5,742.89 | 2.19% | 5.24% |
| 1997 | 873.43 | 1,469.49 | 7,441.15 | 1.77% | 4.57% |
| 1998 | 1,085.50 | 1,794.91 | 8,625.52 | 1.49% | 3.46% |
| 1999 | 1,327.33 | 2,728.15 | 10,464.88 | 1.25% | 3.17% |
| 2000 | 1,427.22 | 2,783.67 | 10,734.90 | 1.15% | 3.63% |
| 2001 | 1,194.18 | 2,035.00 | 10,189.13 | 1.32% | 2.95% |
| 2002 - 2009 Cycle | | | | | |
| 2002 | 993.94 | 1,539.73 | 9,226.43 | 1.61% | 2.92% |
| 2003 | 965.23 | 1,647.17 | 8,993.59 | 1.77% | 3.84% |
| 2004 | 1,130.65 | 1,986.53 | 10,317.39 | 1.72% | 4.89% |
| 2005 | 1,207.23 | 2,099.32 | 10,547.67 | 1.83% | 5.36% |
| 2006 | 1,310.46 | 2,263.41 | 11,408.67 | 1.87% | 5.78% |
| 2007 | 1,477.19 | 2,578.47 | 13,169.98 | 1.86% | 5.29% |
| 2008 | 1,220.04 | 2,161.65 | 11,252.62 | 2.37% | 3.54% |
| 2009 | 948.05 | 1,845.38 | 8,876.15 | 2.40% | 1.86% |
| Current Cycle | | | | | |
| 2010 | 1,139.97 | 2,349.89 | 10,662.80 | 1.98% | 6.04% |
| 2011 | 1,268.89 | 2,677.44 | 11,966.36 | 2.05% | 6.77% |
| 2012 | 1,379.35 | 2,965.56 | 12,967.08 | 2.24% | 6.20% |

[1] Note: this source did not publish the S&P Composite prior to 1988 and the NASDAQ Composite prior to 1991.

Source: Council of Economic Advisors, Economic Indicators, various issues.

STOCK PRICE INDICATORS

| | S&P Composite | NASDAQ Composite | DJIA | S&P D/P | S&P E/P |
|-------------|------------------|---------------------|-----------|------------|------------|
| 2004 | | | | | |
| 1st Qtr. | 1,133.29 | 2,041.95 | 10,488.43 | 1.64% | 4.62% |
| 2nd Qtr. | 1,122.87 | 1,984.13 | 10,289.04 | 1.71% | 4.92% |
| 3rd Qtr. | 1,104.15 | 1,872.90 | 10,129.85 | 1.79% | 5.18% |
| 4th Qtr. | 1,162.07 | 2,050.22 | 10,362.25 | 1.75% | 4.83% |
| 2005 | | | | | |
| 1st Qtr. | 1,191.98 | 2,056.01 | 10,648.48 | 1.77% | 5.11% |
| 2nd Qtr. | 1,181.65 | 2,012.24 | 10,382.35 | 1.85% | 5.32% |
| 3rd Qtr. | 1,225.91 | 2,144.61 | 10,532.24 | 1.83% | 5.42% |
| 4th Qtr. | 1,262.07 | 2,246.09 | 10,827.79 | 1.86% | 5.60% |
| 2006 | | | | | |
| 1st Qtr. | 1,283.04 | 2,287.97 | 10,996.04 | 1.85% | 5.61% |
| 2nd Qtr. | 1,281.77 | 2,240.46 | 11,188.84 | 1.90% | 5.86% |
| 3rd Qtr. | 1,288.40 | 2,141.97 | 11,274.49 | 1.91% | 5.88% |
| 4th Qtr. | 1,389.48 | 2,390.26 | 12,175.30 | 1.81% | 5.75% |
| 2007 | | | | | |
| 1st Qtr. | 1,425.30 | 2,444.85 | 12,470.97 | 1.84% | 5.85% |
| 2nd Qtr. | 1,496.43 | 2,552.37 | 13,214.26 | 1.82% | 5.65% |
| 3rd Qtr. | 1,490.81 | 2,609.68 | 13,488.43 | 1.86% | 5.15% |
| 4th Qtr. | 1,494.09 | 2,701.59 | 13,502.95 | 1.91% | 4.51% |
| 2008 | | | | | |
| 1st Qtr. | 1,350.19 | 2,332.91 | 12,383.86 | 2.11% | 4.55% |
| 2nd Qtr. | 1,371.65 | 2,426.26 | 12,508.59 | 2.10% | 4.05% |
| 3rd Qtr. | 1,251.94 | 2,290.87 | 11,322.40 | 2.29% | 3.94% |
| 4th Qtr. | 909.80 | 1,599.64 | 8,795.61 | 2.98% | 1.65% |
| 2009 | | | | | |
| 1st Qtr. | 809.31 | 1,485.14 | 7,774.06 | 3.00% | 0.86% |
| 2nd Qtr. | 892.23 | 1,731.41 | 8,327.83 | 2.45% | 0.82% |
| 3rd Qtr. | 996.68 | 1,985.25 | 9,229.93 | 2.16% | 1.19% |
| 4th Qtr. | 1,088.70 | 2,162.33 | 10,172.78 | 1.99% | 4.57% |
| 2010 | | | | | |
| 1st Qtr. | 1,121.60 | 2,274.88 | 10,454.42 | 1.94% | 5.21% |
| 2nd Qtr. | 1,135.25 | 2,343.40 | 10,570.54 | 1.97% | 6.51% |
| 3rd Qtr. | 1,096.39 | 2,237.97 | 10,390.24 | 2.09% | 6.30% |
| 4th Qtr. | 1,204.00 | 2,534.62 | 11,236.02 | 1.95% | 6.15% |
| 2011 | | | | | |
| 1st Qtr. | 1,302.74 | 2,741.01 | 12,024.62 | 1.85% | 6.13% |
| 2nd Qtr. | 1,319.04 | 2,766.64 | 12,370.73 | 1.97% | 6.35% |
| 3rd Qtr. | 1,237.12 | 2,613.11 | 11,671.47 | 2.15% | 7.69% |
| 4th Qtr. | 1,225.65 | 2,600.91 | 11,798.65 | 2.25% | 6.91% |
| 2012 | | | | | |
| 1st Qtr. | 1,347.44 | 2,902.90 | 12,839.80 | 2.12% | 6.29% |
| 2nd Qtr. | 1,350.39 | 2,928.62 | 12,765.58 | 2.30% | 6.45% |
| 3rd Qtr. | 1,402.21 | 3,029.86 | 13,118.72 | 2.27% | 6.00% |
| 4th Qtr. | 1,418.21 | 3,001.69 | 13,142.91 | 2.28% | 6.07% |
| 2013 | | | | | |
| 1st Qtr. | 1,514.41 | 3,177.10 | 14,000.30 | 2.21% | 5.59% |
| 2nd Qtr. | 1,609.77 | 3,369.49 | 14,961.28 | 2.15% | 5.66% |
| 3rd Qtr. | 1,675.31 | 3,643.63 | 15,255.25 | 2.14% | 5.65% |

Source: Council of Economic Advisors, Economic Indicators, various issues.

CHAPARRAL CITY WATER COMPANY
CAPITAL STRUCTURE RATIOS
2008 - 2012

| YEAR | COMMON EQUITY | LONG-TERM DEBT | SHORT-TERM DEBT 1/ |
|------|--------------------------------|-------------------------------|-----------------------|
| 2008 | \$22,172,815 71.5% 78.8% | \$5,975,000 19.3% 21.2% | \$2,844,111 9.2% |
| 2009 | \$21,793,722 74.8% 79.4% | \$5,645,000 19.4% 20.6% | \$1,705,989 5.9% |
| 2010 | \$22,957,165 79.4% 81.2% | \$5,300,000 18.3% 18.8% | \$650,997 2.3% |
| 2011 | \$22,854,464 80.3% 82.2% | \$4,935,000 17.3% 17.8% | \$680,434 2.4% |
| 2012 | \$26,949,123 74.1% 85.6% | \$4,545,000 12.5% 14.4% | \$4,876,128 13.4% |

1/ Includes notes/accounts payable to associated companies.

Source: Response to Data Request No. RUCO 6.03.

EPCOR UTILITIES INC.
CAPITAL STRUCTURE RATIOS
2011 - 2012
(\$ MILLIONS)

| YEAR | COMMON EQUITY | LONG-TERM DEBT | SHORT-TERM DEBT 1/ |
|------|------------------|-------------------|-----------------------|
| 2011 | \$2,351 | \$1,682 | \$17 |
| | 58.0% | 41.5% | 0.4% |
| | 58.3% | 41.7% | |
| 2012 | \$2,234 | \$1,956 | \$14 |
| | 53.1% | 46.5% | 0.3% |
| | 53.3% | 46.7% | |

1/ Includes notes/accounts payable to associated companies.

Source: Response to Data Request No. RUCO 6.03.

**PROXY UTILITIES
COMMON EQUITY RATIOS**

| Company | 2008 | 2009 | 2010 | 2011 | 2012 |
|---------------------------------|------|------|------|------|------|
| Value Line Water Group | | | | | |
| American States Water Co. | 54% | 54% | 51% | 54% | 58% |
| American Water Works | | 43% | 42% | 42% | 44% |
| Aqua America, Inc. | 44% | 43% | 42% | 44% | 45% |
| Artesian Resources | 45% | 46% | 41% | 48% | 50% |
| California Water Service Group | 55% | 52% | 46% | 46% | 45% |
| Connecticut Water Service, Inc. | 53% | 54% | 45% | 45% | 50% |
| Middlesex Water | 50% | 44% | 52% | 52% | 51% |
| SJW Corporation | 52% | 50% | 46% | 43% | 44% |
| York Water Company | 45% | 43% | 52% | 53% | 54% |
| Average | 50% | 48% | 46% | 47% | 49% |

Source: AUS Utility Reports.

PROXY UTILITIES DIVIDEND YIELD

| COMPANY | DPS | September-November, 2013 | | | YIELD |
|---------------------------------|--------|--------------------------|---------|---------|-------|
| | | HIGH | LOW | AVERAGE | |
| Value Line Water Group | | | | | |
| American States Water Co. | \$0.81 | \$29.45 | \$25.07 | \$27.26 | 3.0% |
| American Water Works | \$1.12 | \$45.09 | \$39.05 | \$42.07 | 2.7% |
| Aqua America, Inc. | \$0.61 | \$25.78 | \$23.85 | \$24.82 | 2.5% |
| Artesian Resources | \$0.84 | \$23.82 | \$21.70 | \$22.76 | 3.7% |
| California Water Service Group | \$0.64 | \$23.14 | \$18.87 | \$21.01 | 3.0% |
| Connecticut Water Service, Inc. | \$0.99 | \$35.00 | \$30.29 | \$32.65 | 3.0% |
| Middlesex Water | \$0.76 | \$22.14 | \$19.86 | \$21.00 | 3.6% |
| SJW Corporation | \$0.73 | \$30.08 | \$25.63 | \$27.86 | 2.6% |
| York Water Company | \$0.55 | \$22.00 | \$19.05 | \$20.53 | 2.7% |
| Average | | | | | 3.0% |

Source: Yahoo! Finance.

**PROXY UTILITIES
RETENTION GROWTH RATES**

| COMPANY | 2008 | 2009 | 2010 | 2011 | 2012 | Average | 2013 | 2014 | 2016-18 |
|---------------------------------|------|------|------|------|------|---------|------|------|---------|
| Value Line Water Group | | | | | | | | | |
| American States Water Co. | 3.1% | 3.2% | 5.8% | 5.3% | 6.6% | 4.8% | 6.0% | 6.0% | 5.0% |
| American Water Works | 3.0% | 1.8% | 2.8% | 3.5% | 4.6% | 3.1% | 4.5% | 4.5% | 4.5% |
| Aqua America, Inc. | 2.8% | 2.7% | 3.7% | 4.6% | 4.3% | 3.6% | 6.0% | 6.0% | 5.0% |
| Artesian Resources | 1.4% | 2.1% | 2.0% | 0.5% | 2.5% | 1.7% | | | |
| California Water Service Group | 3.8% | 3.8% | 3.0% | 2.3% | 3.4% | 3.3% | 1.5% | 3.0% | 3.0% |
| Connecticut Water Service, Inc. | 1.9% | 2.3% | 1.6% | 1.4% | 2.7% | 2.0% | 3.5% | 3.5% | 3.0% |
| Middlesex Water | 2.0% | 0.1% | 2.1% | 1.0% | 1.4% | 1.3% | 2.0% | 2.5% | 3.0% |
| SJW Corporation | 3.3% | 1.2% | 1.2% | 3.1% | 3.3% | 2.4% | 3.5% | 4.0% | 3.5% |
| York Water Company | 1.4% | 1.9% | 2.7% | 2.5% | 2.4% | 2.2% | 3.0% | 3.0% | 3.0% |
| Average | | | | | | 2.7% | | | |

Source: AUS Utility Reports and Value Line Investment Survey.

**PROXY UTILITIES
PER SHARE GROWTH RATES**

| COMPANY | 5-Year Historic Growth Rates | | | | Est'd '10-'12 to '16-'18 Growth Rates | | | |
|---------------------------------|------------------------------|------|-------|---------|---------------------------------------|------|------|---------|
| | EPS | DPS | BVPS | Average | EPS | DPS | BVPS | Average |
| Value Line Water Group | | | | | | | | |
| American States Water Co. | 11.5% | 4.5% | 5.5% | 7.2% | 6.0% | 9.0% | 2.0% | 5.7% |
| American Water Works | | | -1.5% | -1.5% | 10.0% | 9.0% | 4.5% | 7.8% |
| Aqua America, Inc. | 4.5% | 8.0% | 7.0% | 6.5% | 8.0% | 8.0% | 6.5% | 7.5% |
| Artesian Resources | 2.0% | 4.5% | 4.5% | 3.7% | | | | |
| California Water Service Group | 5.5% | 1.5% | 4.5% | 3.8% | 6.5% | 6.5% | 5.5% | 6.2% |
| Connecticut Water Service, Inc. | 6.5% | 2.0% | 6.5% | 5.0% | 5.5% | 3.5% | 6.0% | 5.0% |
| Middlesex Water | 2.5% | 1.5% | 4.0% | 2.7% | 4.0% | 1.5% | 2.0% | 2.5% |
| SJW Corporation | -1.5% | 4.0% | 3.5% | 2.0% | 7.5% | 4.5% | 5.0% | 5.7% |
| York Water Company | 4.5% | 3.0% | 6.0% | 4.5% | 4.0% | 3.5% | 2.5% | 3.3% |
| Average | | | | 3.8% | | | | 5.5% |

Source: AUS Utility Reports and Value Line Investment Survey.

**PROXY UTILITIES
DCF COST RATES**

| COMPANY | ADJUSTED YIELD | HISTORIC RETENTION GROWTH | PROSPECTIVE RETENTION GROWTH | HISTORIC PER SHARE GROWTH | PROSPECTIVE PER SHARE GROWTH | FIRST CALL EPS GROWTH | AVERAGE GROWTH | DCF RATES |
|---------------------------------|-------------------|---------------------------------|------------------------------------|---------------------------------|------------------------------------|-----------------------------|-------------------|--------------|
| Value Line Water Group | | | | | | | | |
| American States Water Co. | 3.1% | 4.8% | 5.7% | 7.2% | 5.7% | 2.0% | 5.1% | 8.1% |
| American Water Works | 2.7% | 3.1% | 4.5% | | 7.8% | 6.9% | 5.6% | 8.3% |
| Aqua America, Inc. | 2.5% | 3.6% | 5.7% | 6.5% | 7.5% | 5.8% | 5.8% | 8.3% |
| Artesian Resources | 3.7% | 1.7% | | 3.7% | | 4.0% | 3.1% | 6.9% |
| California Water Service Group | 3.1% | 3.3% | 2.5% | 3.8% | 6.2% | 6.0% | 4.4% | 7.5% |
| Connecticut Water Service, Inc. | 3.1% | 2.0% | 3.3% | 5.0% | 5.0% | 5.0% | 4.1% | 7.2% |
| Middlesex Water | 3.7% | 1.3% | 2.5% | 2.7% | 2.5% | 2.7% | 2.3% | 6.0% |
| SJW Corporation | 2.7% | 2.4% | 3.7% | 2.0% | 5.7% | 14.0% | 5.6% | 8.2% |
| York Water Company | 2.7% | 2.2% | 3.0% | 4.5% | 3.3% | 4.9% | 3.6% | 6.3% |
| Mean | 3.0% | 2.7% | 3.9% | 4.4% | 5.5% | 5.7% | 4.4% | 7.4% |
| Median | 3.1% | 2.4% | 3.5% | 4.2% | 5.7% | 5.0% | 4.4% | 7.5% |
| Composite-Mean | | 5.7% | 6.9% | 7.5% | 8.5% | 8.7% | 7.4% | |
| Composite-Median | | 5.5% | 6.6% | 7.2% | 8.7% | 8.1% | 7.4% | |

Note: Negative average growth rates excluded from above DCF analyses.

**STANDARD & POOR'S 500 COMPOSITE
20-YEAR U.S. TREASURY BOND YIELDS
RISK PREMIUMS**

| Year | EPS | BVPS | ROE | 20-YEAR T-BOND | RISK PREMIUM |
|---------|---------|----------|--------|-------------------|-----------------|
| 1977 | | \$79.07 | | | |
| 1978 | \$12.33 | \$85.35 | 15.00% | 7.90% | 7.10% |
| 1979 | \$14.86 | \$94.27 | 16.55% | 8.86% | 7.69% |
| 1980 | \$14.82 | \$102.48 | 15.06% | 9.97% | 5.09% |
| 1981 | \$15.36 | \$109.43 | 14.50% | 11.55% | 2.95% |
| 1982 | \$12.64 | \$112.46 | 11.39% | 13.50% | -2.11% |
| 1983 | \$14.03 | \$116.93 | 12.23% | 10.38% | 1.85% |
| 1984 | \$16.64 | \$122.47 | 13.90% | 11.74% | 2.16% |
| 1985 | \$14.61 | \$125.20 | 11.80% | 11.25% | 0.55% |
| 1986 | \$14.48 | \$126.82 | 11.49% | 8.98% | 2.51% |
| 1987 | \$17.50 | \$134.04 | 13.42% | 7.92% | 5.50% |
| 1988 | \$23.75 | \$141.32 | 17.25% | 8.97% | 8.28% |
| 1989 | \$22.87 | \$147.26 | 15.85% | 8.81% | 7.04% |
| 1990 | \$21.73 | \$153.01 | 14.47% | 8.19% | 6.28% |
| 1991 | \$16.29 | \$158.85 | 10.45% | 8.22% | 2.23% |
| 1992 | \$19.09 | \$149.74 | 12.37% | 7.29% | 5.08% |
| 1993 | \$21.89 | \$180.88 | 13.24% | 7.17% | 6.07% |
| 1994 | \$30.60 | \$193.06 | 16.37% | 6.59% | 9.78% |
| 1995 | \$33.96 | \$215.51 | 16.62% | 7.60% | 9.02% |
| 1996 | \$38.73 | \$237.08 | 17.11% | 6.18% | 10.93% |
| 1997 | \$39.72 | \$249.52 | 16.33% | 6.64% | 9.69% |
| 1998 | \$37.71 | \$266.40 | 14.62% | 5.83% | 8.79% |
| 1999 | \$48.17 | \$290.68 | 17.29% | 5.57% | 11.72% |
| 2000 | \$50.00 | \$325.80 | 16.22% | 6.50% | 9.72% |
| 2001 | \$24.69 | \$338.37 | 7.43% | 5.53% | 1.90% |
| 2002 | \$27.59 | \$321.72 | 8.36% | 5.59% | 2.77% |
| 2003 | \$48.73 | \$367.17 | 14.15% | 4.80% | 9.35% |
| 2004 | \$58.55 | \$414.75 | 14.98% | 5.02% | 9.96% |
| 2005 | \$69.93 | \$453.06 | 16.12% | 4.69% | 11.43% |
| 2006 | \$81.51 | \$504.39 | 17.03% | 4.68% | 12.35% |
| 2007 | \$66.17 | \$529.59 | 12.80% | 4.86% | 7.94% |
| 2008 | \$14.88 | \$451.37 | 3.03% | 4.45% | -1.42% |
| 2009 | \$50.97 | \$513.58 | 10.56% | 3.47% | 7.09% |
| 2010 | \$77.35 | \$579.14 | 14.16% | 4.25% | 9.91% |
| 2011 | \$86.58 | \$613.14 | 14.52% | 3.81% | 10.71% |
| 2012 | \$86.51 | \$666.97 | 13.52% | 2.40% | 11.12% |
| Average | | | 13.69% | 7.12% | 6.60% |

Sources: Standard & Poor's Analysts' Handbook and Morningstar 2013 Yearbook.

PROXY UTILITIES CAPM COST RATES

| COMPANY | RISK-FREE RATE | BETA | RISK PREMIUM | CAPM RATES |
|---------------------------------|-------------------|------|-----------------|---------------|
| Value Line Water Group | | | | |
| American States Water Co. | 3.47% | 0.70 | 5.47% | 7.3% |
| American Water Works | 3.47% | 0.65 | 5.47% | 7.0% |
| Aqua America, Inc. | 3.47% | 0.60 | 5.47% | 6.8% |
| Artesian Resources | 3.47% | 0.60 | 5.47% | 6.8% |
| California Water Service Group | 3.47% | 0.65 | 5.47% | 7.0% |
| Connecticut Water Service, Inc. | 3.47% | 0.75 | 5.47% | 7.6% |
| Middlesex Water | 3.47% | 0.70 | 5.47% | 7.3% |
| SJW Corporation | 3.47% | 0.85 | 5.47% | 8.1% |
| York Water Company | 3.47% | 0.70 | 5.47% | 7.3% |
| Mean | | | | 7.2% |
| Median | | | | 7.3% |

| | | |
|-----------------|------------|--------------|
| 1/ 20-yr T-bond | Month | Rate |
| | Sep, 2013 | 3.53% |
| | Oct., 2013 | 3.38% |
| | Nov., 2013 | 3.50% |
| | | <u>3.47%</u> |

Sources: Value Line Investment Survey, Standard & Poor's Analysts' Handbook, Morningstar 2013 Yearbook.

PROXY UTILITIES
RATES OF RETURN ON AVERAGE COMMON EQUITY

| COMPANY | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 1992-2001 Average | 2002-2008 Average | 2009-2012 Average | 2013 | 2014 | 2016- 2018 |
|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|-------|-------|----------------------|----------------------|----------------------|-------|-------|---------------|
| Value Line Water Group | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| American States Water Co. | 14.0% | 11.7% | 9.5% | 10.0% | 10.0% | 9.4% | 9.5% | 10.2% | 9.6% | 10.5% | 9.6% | 5.6% | 8.0% | 10.4% | 8.2% | 9.3% | 7.2% | 8.8% | 9.0% | 11.7% | 11.8% | 10.4% | 8.3% | 10.3% | 12.5% | 12.0% | 11.5% |
| Aqua America, Inc. | 10.8% | 11.3% | 10.8% | 11.3% | 10.4% | 10.5% | 10.7% | 13.8% | 13.0% | 14.0% | 13.9% | 12.3% | 11.4% | 11.5% | 11.0% | 10.0% | 9.6% | 9.6% | 10.0% | 11.6% | 13.0% | 10.5% | 11.4% | 11.3% | 12.0% | 12.0% | 12.5% |
| Artesian Resources | 10.4% | 12.6% | 10.6% | 10.0% | 12.6% | 14.5% | 11.0% | 11.4% | 10.3% | 7.5% | 9.6% | 8.7% | 9.8% | 9.3% | 7.6% | 4.0% | 7.4% | 8.1% | 8.2% | 8.5% | 9.5% | 11.1% | 8.6% | 8.6% | 7.0% | 8.0% | 9.5% |
| California Water Service Group | 12.1% | 12.6% | 12.8% | 12.7% | 12.4% | 12.3% | 12.2% | 12.4% | 11.8% | 13.3% | 11.6% | 11.2% | 11.4% | 12.0% | 7.5% | 8.9% | 9.2% | 7.4% | 8.5% | 8.7% | 7.2% | 10.6% | 10.3% | 9.0% | 9.0% | 9.5% | 8.5% |
| Connecticut Water Service, Inc. | 11.7% | 12.6% | 12.1% | 12.0% | 12.4% | 11.2% | 10.7% | 10.2% | 8.5% | 9.0% | 9.8% | 8.2% | 8.3% | 8.4% | 6.6% | 8.8% | 8.8% | 7.0% | 9.0% | 7.7% | 7.5% | 10.5% | 8.7% | 7.8% | 8.0% | 8.5% | 9.0% |
| Middlesex Water | 11.8% | 11.8% | 0.6% | 10.8% | 16.2% | 12.0% | 11.6% | 11.1% | 9.8% | 9.5% | 9.4% | 9.8% | 11.3% | 11.5% | 18.2% | 8.3% | 11.2% | 6.0% | 9.6% | 8.0% | 8.6% | 11.4% | 11.4% | 8.1% | 8.6% | 8.5% | 9.0% |
| SJW Corporation | 11.6% | 12.6% | 11.7% | 10.7% | 11.1% | 10.9% | 10.3% | 10.3% | 11.9% | 11.5% | 16.7% | 11.7% | 12.2% | 11.8% | 10.5% | 9.7% | 0.4% | 9.6% | 10.0% | 9.7% | 8.1% | 11.3% | 11.7% | 9.6% | 9.5% | 10.0% | 10.0% |
| York Water Company | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mean | 11.7% | 12.1% | 11.0% | 11.2% | 11.9% | 11.7% | 11.1% | 11.0% | 10.0% | 10.5% | 11.3% | 9.4% | 10.0% | 10.5% | 10.2% | 8.6% | 9.1% | 8.3% | 9.3% | 9.9% | 10.0% | 11.1% | 9.9% | 9.5% | 9.3% | 9.8% | 9.8% |
| Median | 11.8% | 12.2% | 11.0% | 11.1% | 11.5% | 11.6% | 10.7% | 10.3% | 9.6% | 9.7% | 9.7% | 9.3% | 10.6% | 11.0% | 9.4% | 8.9% | 9.3% | 8.5% | 9.0% | 9.7% | 9.8% | 10.9% | 9.7% | 9.2% | 8.8% | 9.0% | 9.5% |
| Source: ALIS Utility Database and Value Line | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Source: AUS Utility Reports and Value Line Investment Survey

PROXY UTILITIES
MARKET TO BOOK RATIOS

| COMPANY | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 1992-2001 Average | 2002-2008 Average | 2009-2012 Average |
|---------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|----------------------|----------------------|----------------------|
| | | | | | | | | | | | | | | | | | | | | | | | | |
| Value Line Water Group | | | | | | | | | | | | | | | | | | | | | | | | |
| American States Water Co. | 142% | 156% | 124% | 120% | 134% | 137% | 148% | 177% | 168% | 182% | 176% | 178% | 181% | 230% | 205% | 219% | 210% | 189% | 167% | 162% | 202% | 149% | 200% | 180% |
| American Water Works | 129% | 140% | 132% | 142% | 156% | 178% | 199% | 172% | 143% | 248% | 304% | 280% | 321% | 436% | 332% | 259% | 238% | 221% | 117% | 136% | 151% | 164% | 310% | 124% |
| Aqua America, Inc. | 140% | 158% | 151% | 124% | 189% | 237% | 313% | 287% | 302% | 365% | 304% | 207% | 214% | 215% | 196% | 150% | 117% | 150% | 264% | 243% | 266% | 227% | 180% | 249% |
| Artisan Resources | | | | | | | 156% | 168% | 145% | 183% | 159% | 189% | 218% | 264% | 223% | 199% | 222% | 190% | 154% | 131% | 145% | 164% | 180% | 145% |
| California Water Service Group | 147% | 172% | 157% | 140% | 160% | 191% | 207% | 202% | 186% | 201% | 199% | 189% | 233% | 216% | 211% | 199% | 173% | 185% | 194% | 163% | 161% | 176% | 219% | 172% |
| Connecticut Water Service, Inc. | 102% | 180% | 154% | 149% | 156% | 168% | 193% | 216% | 226% | 304% | 275% | 268% | 214% | 214% | 179% | 184% | 141% | 174% | 162% | 204% | 205% | 191% | 225% | 187% |
| Middlesex Water | 111% | 184% | 169% | 150% | 150% | 164% | 176% | 218% | 222% | 248% | 225% | 265% | 214% | 214% | 307% | 236% | 175% | 203% | 162% | 180% | 164% | 179% | 203% | 165% |
| SJW Corporation | 147% | 172% | 157% | 140% | 180% | 191% | 207% | 202% | 186% | 201% | 199% | 189% | 218% | 264% | 307% | 236% | 175% | 203% | 167% | 166% | 172% | 176% | 227% | 177% |
| York Water Company | 169% | 174% | 87% | 197% | 195% | 226% | 198% | 174% | 154% | 164% | 277% | 335% | 275% | 367% | 305% | 266% | 190% | 203% | 235% | 234% | 229% | 176% | 288% | 225% |
| Mean | 143% | 167% | 141% | 145% | 163% | 187% | 200% | 202% | 193% | 235% | 227% | 239% | 234% | 276% | 245% | 217% | 183% | 178% | 181% | 176% | 188% | 178% | 232% | 181% |
| Median | 145% | 172% | 153% | 141% | 158% | 185% | 198% | 202% | 186% | 201% | 212% | 236% | 218% | 247% | 217% | 219% | 183% | 189% | 167% | 163% | 172% | 174% | 219% | 173% |

Source: AUS Utility Reports and Value Line Investment Survey.

**STANDARD & POOR'S 500 COMPOSITE
RETURNS AND MARKET-TO-BOOK RATIOS
1992 - 2012**

| YEAR | RETURN ON AVERAGE EQUITY | MARKET-TO BOOK RATIO |
|-----------|-----------------------------|-------------------------|
| 1992 | 12.2% | 271% |
| 1993 | 13.2% | 272% |
| 1994 | 16.4% | 246% |
| 1995 | 16.6% | 264% |
| 1996 | 17.1% | 299% |
| 1997 | 16.3% | 354% |
| 1998 | 14.6% | 421% |
| 1999 | 17.3% | 481% |
| 2000 | 16.2% | 453% |
| 2001 | 7.5% | 353% |
| 2002 | 8.4% | 296% |
| 2003 | 14.2% | 278% |
| 2004 | 15.0% | 291% |
| 2005 | 16.1% | 278% |
| 2006 | 17.0% | 277% |
| 2007 | 12.8% | 284% |
| 2008 | 3.3% | 224% |
| 2009 | 10.6% | 187% |
| 2010 | 14.2% | 208% |
| 2011 | 14.6% | 208% |
| 2012 | 13.5% | 214% |
| Averages: | | |
| 1992-2001 | 14.7% | 341% |
| 2002-2008 | 12.4% | 275% |
| 2009-2012 | 13.2% | 204% |

Source: Standard & Poor's Analyst's Handbook, 2013 edition, page 1.

RISK INDICATORS

| GROUP | VALUE LINE SAFETY | VALUE LINE BETA | VALUE LINE FIN STR | S & P STK RANK |
|--------------------------|----------------------|--------------------|-----------------------|-------------------|
| S & P's 500 Composite | 2.6 | 1.05 | B++ | B+ |
| Value Line Water Group | 2.4 | 0.69 | B+ | A- |

Sources: Value Line Investment Survey, Standard & Poor's Stock Guide.

Definitions:

Safety rankings are in a range of 1 to 5, with 1 representing the highest safety or lowest risk.

Beta reflects the variability of a particular stock, relative to the market as a whole. A stock with a beta of 1.0 moves in concert with the market, a stock with a beta below 1.0 is less variable than the market, and a stock with a beta above 1.0 is more variable than the market.

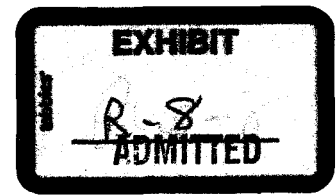
Financial strengths range from C to A++, with the latter representing the highest level.

Common stock rankings range from D to A+, with the latter representing the highest level.

RISK INDICATORS

| COMPANY | VALUE LINE SAFETY | VALUE LINE BETA | VALUE LINE FINANCIAL STRENGTH | | S& P STOCK RANKING | |
|---------------------------------|----------------------|--------------------|-------------------------------------|------|--------------------------|------|
| Value Line Water Group | | | | | | |
| American States Water Co. | 2 | 0.70 | A | 4.00 | A- | 3.67 |
| American Water Works | 3 | 0.65 | B+ | 3.33 | NR | |
| Aqua America, Inc. | 2 | 0.60 | B++ | 3.67 | A | 4.00 |
| Artesian Resources | 2 | 0.60 | B | 3.00 | A- | 3.67 |
| California Water Service Group | 3 | 0.65 | B++ | 3.67 | A- | 3.67 |
| Connecticut Water Service, Inc. | 3 | 0.75 | B+ | 3.33 | B+ | 3.33 |
| Middlesex Water | 2 | 0.70 | B++ | 3.67 | A- | 3.67 |
| SJW Corporation | 3 | 0.85 | B+ | 3.33 | B+ | 3.33 |
| York Water Company | 2 | 0.70 | B+ | 3.33 | A | 4.00 |
| Average | 2.4 | 0.69 | B+ | 3.48 | A- | 3.67 |

Sources: Standard & Poor's Stock Guide and Value Line Investment Survey.



BEFORE THE ARIZONA CORPORATION COMMISSION

COMMISSIONERS

BOB STUMP, Chairman
GARY PIERCE
BRENDA BURNS
SUSAN BITTER SMITH
BOB BURNS

IN THE MATTER OF THE APPLICATION OF)
CHAPARRAL CITY WATER COMPANY FOR)
A DETERMINATION OF THE CURRENT FAIR)
VALUE OF ITS UTILITY PLANT AND)
PROPERTY AND FOR INCREASE IN ITS)
RATES AND CHARGES BASED THEREON)

DOCKET NO. W-02113A-13-0118

SURREBUTTAL TESTIMONY

OF

DAVID C. PARCELL
PRESIDENT
TECHNICAL ASSOCIATES, INC.

ON BEHALF OF

RESIDENTIAL UTILITY CONSUMERS OFFICE

FEBRUARY 7, 2014

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INTRODUCTION

Q. Please state your name, occupation and business address.

A. My name is David C. Parcell. I am President of Technical Associates, Inc. My business address is 9030 Stony Point Parkway, Suite 580, Richmond, VA 23235.

Q. Are you the same David C. Parcell who filed Direct Testimony on behalf of the Residential Utility Consumer Office ("RUCO") on December 9, 2013?

A. Yes, I am.

Q. What is the purpose of your current testimony?

A. My present testimony is prepared to respond to the Rebuttal Testimony of Chaparral City Water Company ("Chaparral City") witness Pauline M. Ahern.

Q. How have you organized your responses to Ms. Ahern's Rebuttal Testimony concerning the common equity cost rate?

A. Ms. Ahern's Rebuttal Testimony addresses applications of three cost of equity models – DCF, CAPM, and CE. Her Rebuttal Testimony also addresses her proposed credit risk and business risk adjustments. Accordingly, my Surrebuttal Testimony addresses each of these concepts in turn.

Q. Have you prepared an exhibit in support of your testimony?

A. Yes, I have prepared one exhibit, identified as Exhibit__ (DCP-2). This is comprised of 8 schedules.

DISCOUNTED CASH FLOW MODEL (DCF)

Q. Please proceed with Ms. Ahern's comments on your implementation of the DCF model. Ms. Ahern maintains in her Rebuttal Testimony on pages 36-37 that the DCF model has a tendency to mis-specify investors' required return rates, and thus, the cost of equity for a utility when the market price of utility stocks exceeds the book value. Do you agree with this position?

1 A. No, I do not. Knowledgeable and/or informed investors are well aware of the fact that
2 most utilities have their rates set based on the book value of their assets (i.e., rate base
3 and capital structure). This knowledge is reflected in the prices that investors are willing
4 to pay for stocks and thus is reflected in DCF cost rates. To make a modification of the
5 DCF cost rates, as Ms. Ahern implicitly proposes, amounts to an attempt to "reprice"
6 stock values in order to develop a DCF cost rate more in line with what she thinks the
7 results should be. This is clearly a violation of the principle of "efficient markets", which
8 Ms. Ahern cites extensively in her Rebuttal Testimony. If one believes that markets are
9 efficient, there is no reason to modify either stock prices or market models that are based
10 on stock prices.

11
12 **Q. On page 30, lines 8-11 of her Rebuttal Testimony, Ms. Ahern maintains that**
13 **exclusive reliance on analysts' forecasts of earnings per share is appropriate in a**
14 **DCF context. Do you have any comments on this?**

15 A. Yes, I do. I first note that I do not criticize her for using analysts' forecasts of EPS as on
16 one component of growth in her interpretation of the DCF model. In fact, I use EPS
17 forecasts in my DCF analyses as well. What I criticize her for is the exclusive reliance on
18 EPS forecasts and her criticism of any witness who considers alternative growth
19 indicators. As I indicate in my Direct Testimony, investors have a multitude of
20 information available to use in making investment decisions. It is overly simplistic to
21 believe that all investors rely exclusively on EPS forecasts, yet that is what Ms. Ahern is
22 implicitly assuming.

23
24 **Q. Is Ms. Ahern inconsistent in her claim that the DCF model "understates" investors**
25 **required returns?**

26 A. Yes, she is. First she claims (page 15, lines 27-28) that the DCF model is "predicated" on
27 the Efficient Market Hypothesis." Then she maintains (pages 20-22 and elsewhere) that
28 the DCF model produces "understated" results. It cannot be both ways. If the financial
29 markets are, in effect, efficient, the DCF model results are, by definition, reflective of
30 these efficient conditions.

1 **Q. Why is it improper to rely exclusively on EPS forecasts in a DCF analysis?**

2 A. There are several reasons why it is not appropriate to rely exclusively on analysts'
3 forecasts in the DCF context. First, it is not realistic to believe that all investors rely
4 exclusively on a single factor, such as analysts' forecasts of EPS, in making their
5 investment decisions. Investors have an abundance of available information to assist
6 them in evaluating stocks; EPS forecasts are only one of many such statistics.

7
8 Second, Value Line – one of Ms. Ahern's sources of EPS projections – publishes a large
9 number of both historic and forecasted data, as well as ratios, for publicly-traded
10 companies. Presumably, both types of information are published for the consideration of
11 its subscribers/investors. Yet, Ms. Ahern considers only one factor – and only the
12 forecast version of EPS in her analyses.

13
14 Third, the vast majority of information available to investors, by both individual
15 companies in the form of annual reports and offering circulars, and by investment
16 publications such as Value Line, is historic data. One such source of historic data is
17 published by Ms. Ahern's firm – AUS Utility Reports. It is neither realistic nor logical to
18 maintain that investors only consider projected (estimated) data to the total exclusion of
19 historic (actual) data.

20
21 Fourth, the experience over the past several years should be a clear signal to investors
22 that analysts cannot accurately predict EPS levels. Few, if any, analysts predicted the
23 decline in security prices in the tech market crash of 2000-2002, as well as the financial
24 crisis of 2008 and 2009.¹ Thus, relying only on forecasted EPS levels, while ignoring
25 historic EPS levels and other factors, cannot and will not produce accurate results.

26
27 In summary, investors are now very much aware of recent failures of security analysts to
28 accurately predict EPS growth. These problems clearly call into question the reliance on

¹ As demonstration of this, see "Security Analysts and their Recommendations,"
(<http://thismatter.com/money/stocks/valuation/security-analysts.htm>).

analysts' forecasts as the only source of growth in a DCF context. As a result, the landscape has changed in recent years and investors have ample reasons to doubt the reliability of such forecasts at the present time. In light of the above, it is problematic to rely exclusively on such forecasts in determining the cost of equity for Chaparral City.

Q. Are you aware of any recent analyses and comments on the accuracy of analysts' forecasts?

A. Yes, I am. A 2010 study by McKinsey & Company, titled, "Equity Analysts: Still Too Bullish" concludes that "after almost a decade of stricter regulation, analysts' earnings forecasts continue to be excessively optimistic." I have attached as copy of this study as Exhibit ___(DCP-2), Schedule 1. The significance of this study, as well as the points I raised previously, is that investors should be hesitant to rely exclusively on analysts' forecasts in making investment decisions.

Q. Has the United States Securities and Exchange Commission issued any reports that address the exclusive reliance of analysts' recommendations?

A. Yes. In a 2010 "Investor Alert: Analyzing Analyst Recommendations" the Securities and Exchange Commission ("SEC") made the following statement:

As a general matter, investors should not rely solely on an analyst's recommendation when deciding whether to buy, hold, or sell a stock. Instead, they should also do their own research – such as reading the prospectus for new companies or for public companies, the quarterly and annual reports filed with the SEC – to confirm whether a particular investment is appropriate for them in light of their individual financial circumstances.

The SEC "Investor Alert" (attached as Exhibit ___(DCP-2), Schedule 2) also cites potential conflicts of interest that analysts face. This "Investor Alert" thus also calls into question the exclusive reliance on analysts' forecasts, as proposed by Ms. Ahern.

1 **Q. On pages 27-29 of her Rebuttal Testimony, Ms. Ahern states her belief that**
2 **“sustainable growth” (which both you and Mr. Cassady employ) is “circular and**
3 **ignores the basic principle of rate base/rate of return regulation.” Do you agree**
4 **with this assertion?**

5 **A.** No, I do not. Sustainable growth is a long-standing and integral part of the estimation of
6 the growth rate in a DCF analysis. For example, the Federal Energy Regulatory
7 Commission (“FERC”) routinely uses “fundamental growth,” or sustainable growth, as
8 one of two estimates of growth in its preferred DCF model for electric utilities.
9

10 **CAPITAL ASSET PRICING MODEL (CAPM)**

11 **Q. What is the first point Ms. Ahern addresses in her Rebuttal Testimony on the**
12 **CAPM issue?**

13 **A.** Ms. Ahern’s first point is to express her disagreement with my position that the CAPM
14 specifically recognizes the risk of a particular company or industry, whereas the simple
15 risk premium does not (per pages 37-38 of her Rebuttal Testimony). Ms. Ahern states
16 her opinion that I am “incorrect” in my position. I disagree with her on this point.
17

18 Ms. Ahern’s position apparently focuses only on the use of public utility bond yields in
19 her interpretation of the risk premium analysis which she believes properly recognizes the
20 risk of the subject company. This is misleading in terms of its ability to measure risk
21 comparability. My CAPM analysis uses a specific measure of risk (i.e., beta) that reflects
22 the relative stock price variability of specific stocks, or groups of similar-risk stocks. As
23 such, the beta component in a CAPM analysis does specifically recognize the risk of the
24 subject company, unlike the risk premium that essentially assigns the same cost of equity
25 for all utilities with the same bond rating.
26

27 **Q. Ms. Ahern states her belief, on pages 39-40 of her Rebuttal Testimony, that your use**
28 **of 20-year U.S. Treasury Bonds ignores the fact that both the cost of capital and**
29 **ratemaking are prospective.” Do you have any comments on her position?**

1 A. Yes, I do. Given that Ms. Ahern's risk premium model relies on historic risk premiums
2 dating back to 1926, I find her statement to be inconsistent with her own analyses.
3 Nevertheless, my use of 20 year U.S. Treasury bonds uses the most recent three-month
4 average yields, which is more properly described as "current yields," rather than her
5 description as "historic yields."

6
7 I also note that Ms. Ahern again makes reference to the efficient market hypothesis in this
8 section of her testimony. As I indicated previously, her DCF analyses implicitly assumes
9 that markets are not efficient that that stock prices (i.e., DCF cost rates) do not reflect the
10 cost of capital. I respectfully submit that she cannot have it both ways.

11
12 **Q. On pages 39 and 40 of her Rebuttal Testimony, Ms. Ahern maintains that your**
13 **CAPM analysis should have used forecasted yields on U.S. Treasury Bonds rather**
14 **than the current yields you used. What is your response to her assertion?**

15 A. I disagree with Ms. Ahern. It is proper to use the current yield as the risk-free rate in a
16 CAPM context. This is the case since the current yield is known and measurable and
17 reflects investors' collective assessment of all capital market conditions. Prospective
18 interest rates, in contrast, are not measurable and not achievable. For example, if the
19 current yield on 20-year U.S. Treasury Bonds is 3.5 percent, this reflects the rate that
20 investors can actually receive on their investment. Investors cannot receive a prospective
21 yield on their investments since such a yield is not actual but rather speculative.

22
23 Use of the current yield in a DCF context is similar to using the current risk-free rate in a
24 CAPM context. Analysts do not use prospective stock prices as the basis for the dividend
25 yield in a DCF analysis, as use of prospective stock prices is speculative. Use of current
26 stock prices is appropriate, as this is consistent with the efficient market hypothesis that
27 Ms. Ahern cites throughout her Rebuttal Testimony. Likewise, current levels of interest
28 rates reflect all current information (i.e., the efficient market hypothesis) and should be
29 used as the risk-free rate in the CAPM.
30

1 **Q. Ms. Ahern states, on pages 41-45 of her Rebuttal Testimony, that it is improper to**
2 **consider geometric mean returns in the determination of a risk premium and that**
3 **only arithmetic returns are appropriate. Do you agree with this position?**

4 A. No, I do not. It is apparent that investors have access to both types of returns when they
5 make investment decisions.

6
7 In fact, it is noteworthy that mutual fund investors regularly receive reports on their own
8 funds, as well as prospective funds they are considering investing in, which show only
9 geometric returns. Based on this, I find it difficult to accept Ms. Ahern's position that
10 only arithmetic returns are appropriate.

11
12 **Q. Does Ms. Ahern use Value Line information in her cost of capital analyses?**

13 A. Yes, she does. She has in fact cited Value Line reports on various water utilities on her
14 Exhibit PMA-2, Schedules 4R and 6R.

15
16 **Q. Do the value line reports show historic and prospective growth rates for the water**
17 **utilities?**

18 A. Yes, they do.

19
20 **Q. Do these value line reports show historic and prospective returns on an arithmetic**
21 **basis?**

22 A. No, they do not.

23
24 **Q. Do the value line reports show historic and prospective returns on a geometric, or**
25 **compound growth rate basis?**

26 A. Yes, they do. See Exhibit___(DCP-2), Schedule 3, which describes Value Line's method
27 of calculating growth rates. As a result, any investor reviewing Value Line, as Ms. Ahern
28 does, would be using geometric growth rates.

1 **Q. Is it your position that only geometric growth rates should be used?**

2 A. No. I believe that both arithmetic and geometric growth rates should be used as I have
3 done in my Direct Testimony on page 22 and Exhibit ___ (DCP-1) Schedule 7. This is the
4 case because investors have access to both and presumably use both. This is also
5 consistent with the efficient market hypothesis, which Ms. Ahern cites.

6
7 **Q. On pages 45-46, Ms. Ahern also takes issue with your use of achieved rates of return
8 on book equity in deriving the equity risk premium in your CAPM analysis. What
9 is your response to this?**

10 A. I disagree with Ms. Ahern. As I indicate on pages 21-22 in my Direct Testimony, I used
11 measures of both book returns and market returns in developing my CAPM market risk
12 premium components. The rates (i.e., prices) of public utilities are set based upon the
13 book values of their rate base and capital structures, as well as the book levels of
14 expenses and revenues. As such, it is appropriate to consider the level of return on book
15 equity in the determination of the cost of equity (which is applied to the book level of
16 common equity). I also note that the risk premium I derive from my use of book rates of
17 return is the highest of the three risk premiums I considered in my CAPM analyses.

18
19 **Q. On pages 47-49 of her Rebuttal Testimony, Ms. Ahern maintains you should have
20 incorporated an empirical CAPM in your analyses. Do you agree?**

21 A. No, I do not agree. Ms. Ahern advocates what she describes as an "empirical" CAPM
22 analysis. This form of the CAPM assumes that beta for an industry understates the
23 industry's volatility and thus, risk and it is necessary to substitute the overall market's
24 beta (i.e., 1.0) for one-fourth of the industry's actual beta. Ms. Ahern assumes that the
25 appropriate beta in a CAPM analysis is a combination of the actual industry beta with a
26 75 percent weight and a beta of 1 with a 25 percent weight.

27
28 The use of an empirical CAPM overstates the cost of equity for companies with betas
29 below that of the market. What the empirical CAPM actually does is inflate the CAPM
30 cost for the selected company or industry on one-fourth of its equity and assumes that

one-fourth of the company has the risk of the overall market. This is not appropriate for Chaparral City or for other utilities.

Q. Do you agree with Ms. Ahern's recalculation of your CAPM analyses, on pages 49-50 and Schedule 8 of her Rebuttal Testimony, in which she has re-done your CAPM analyses?

A. No, I do not. For the same reasons I have previously indicated in this Surrebuttal Testimony, her proposed manipulations of my CAPM analyses are not appropriate.

Q. Ms. Ahern claims, on page 50, lines 25-27 through page 51, lines 1-6 of her Rebuttal Testimony and her Schedule 9R, that risk premiums have increased from 2009 to the present. What is your response to this claim?

A. Ms. Ahern's claim selectively uses the beginning point of her comparison as the period ending 2009. However, this was in the midst of the financial crisis cited in my Direct Testimony and is not an appropriate beginning point for such an historical comparison of risk premiums.

The table below indicates that risk premiums, tabulated using Morningstar (Ibbotson) data, have declined since the period prior to the Great Recession:

| Period Ending | Geometric Returns | | | Arithmetic Returns | | |
|------------------|-------------------|----------------|-----------------|--------------------|----------------|-----------------|
| | Stocks | Gov't Bonds | Risk Premium | Stocks | Gov't Bonds | Risk Premium |
| 2006 | 10.4 | 5.4 | 5.0 | 12.3 | 5.8 | 6.5 |
| 2007 | 10.4 | 5.5 | 4.9 | 12.3 | 5.8 | 6.5 |
| 2008 | 9.6 | 5.7 | 3.9 | 11.7 | 6.1 | 5.6 |
| 2009 | 9.8 | 5.4 | 4.4 | 11.8 | 5.8 | 6.0 |
| 2010 | 9.9 | 5.5 | 4.4 | 11.9 | 5.9 | 6.0 |
| 2011 | 9.8 | 5.7 | 4.1 | 11.8 | 6.1 | 5.7 |
| 2012 | 9.8 | 5.7 | 4.1 | 11.8 | 6.1 | 5.7 |

This indicates that risk premiums have declined from those that prevailed in prior years, both those periods prior to the Great Recession and those periods since 2009.

COMPARABLE EARNINGS (CE) METHOD

Q. On page 55 of her Rebuttal Testimony, Ms. Ahern indicates her belief that your association of market-to-book ratios and returns on equity are “not supported by either the academic literature nor by a historical analysis of the experience of unregulated companies.” What is your response to this?

A. I disagree with Ms. Ahern on this point. Clearly, public utilities have their rates regulated (i.e., set) based upon their book value of rate base and capital structure. Investors are aware of this relationship (i.e., efficient market hypothesis, to again quote Ms. Ahern). Any reference to the experience of unregulated companies, as is evident in Ms. Ahern’s rebuttal testimony, simply misses the point of public utility regulation.

Q. On pages 56-58 of her Rebuttal Testimony, Ms. Ahern states that she has “performed an analysis to determine the existence of a direct relationship between the market-to-book ratios of unregulated companies and their earned rates of return on book common equity.” Is her study relevant for public utilities?

A. No, it is not. Ms. Ahern’s study applies to the S&P 500, which is predominately made up of unregulated firms. Many unregulated firms, such as energy producing companies and technology-related companies, have book values that do not reflect the actual value of their underlying assets. As a result, the prices they charge are not related to the book value of their assets.

Utilities, in contrast, have their rates established based upon the book values of their assets (i.e., rate base) and liabilities/common equity (i.e., capital structure). As a result, book value is very relevant for utilities.

Q. Ms. Ahern states, on pages 58-59 of her Rebuttal Testimony, that any proxy group selected for a CE analysis should be “broad based” and not include other utilities. Do you agree?

A. No, I do not. Ms. Ahern maintains that a proxy group selected for use in a CE analysis “should exclude utilities to avoid circularity since the achieved returns on book common

1 equity of utilities, being a function of the regulatory process, are substantially influenced
2 by regulatory awards.” In reality, this is the reason that utility returns should be
3 considered in a CE analysis.
4

5 I do not regard the use of utility returns as being circular. In contrast, use of utility
6 returns is necessary and appropriate in order to conform to the “relative risk” dictates of
7 the Bluefield and Hope decisions cited in my Direct Testimony. Contrary to Ms. Ahern’s
8 position, it is appropriate to consider the impact of regulatory awards since these reflect
9 the same types of analyses (i.e., DCF, CAPM, and CE) that should be utilized in the
10 current proceeding.
11

12 **Q. On page 55, Ms. Ahern asserts her belief that there is no direct relationship between**
13 **market-to-book ratios and returns on equity. What is your response to this?**

14 A. Ms. Ahern is essentially stating that there is no relationship between earnings and stock
15 prices. This is the case since the book value is an element in both ROE and M/B. It
16 follows from this that her logic is that EPS and stock prices are not related. This, of
17 course, runs counter to her DCF analyses that only consider EPS growth.
18

19 **Q. Does Ms. Ahern recognize the concept of market-to-book ratios in her Rebuttal**
20 **Testimony?**

21 A. Yes, she does. On page 35, lines 1-3 of her Rebuttal Testimony, Ms. Ahern “assumed”
22 that Chaparral City had the same market-to-book value as the average sample water
23 utility.
24

25 **MS. AHERN’S “CORRECTED CONCLUSION OF MR. PARCELL’S COST OF**
26 **COMMON EQUITY”**

27 **Q. On pages 59-60 of her Rebuttal Testimony, Ms. Ahern presents what she describes**
28 **as “corrections” to your DCF, CAPM and CE results. Do you agree with these**
29 **“corrections?”**

1 A. No, I do not. In fact, her analyses are not "corrections" at all, but rather reflect her
2 criticisms of my Direct Testimony and the substitution of her model inputs for my inputs.
3 As I have described above, her criticisms and "corrections" are without merit and do not
4 reflect proper implementations of the DCF, CAPM and CE analyses.

5
6 **Q. Based upon your review of Ms. Ahern's Rebuttal Testimony, do you still**
7 **recommend a ROE for Chaparral City of 9.35 percent?**

8 A. Yes, I do. There is nothing in Ms. Ahern's Rebuttal Testimony that causes me to change
9 my analyses, data sources or recommendations.

10
11 **BUSINESS RISKS ADJUSTMENT PROPOSED BY MS. AHERN**

12 **Q. Ms. Ahern maintains, on pages 60-62 of her Rebuttal Testimony, that Chaparral**
13 **City is a small company and its own size implies it should be rewarded with a higher**
14 **rate of return. Do you have any response to this?**

15 A. Yes, I do. As I have noted in my Direct Testimony on pages 12-13 and 32, Chaparral
16 City does not access equity markets for new common equity. Chaparral City's equity is
17 provided by its parent companies. As a result, the perceived small size of Chaparral City
18 should not be considered as a factor in establishing its cost of equity.

19
20 **Q. Is it proper to compare the size of Chaparral City to the water proxy companies and**
21 **make risk comparisons based upon the size differentials between them?**

22 A. No, it is not proper. Most of the proxy water utilities have multiple subsidiaries that
23 operate in different jurisdictions. Following Ms. Ahern's reasoning, each of the
24 subsidiaries of the proxy water utility utilities should be considered as more risky than the
25 proxy group since, by definition, they would have to be smaller. This reasoning is
26 flawed, since these individual water company subsidiaries do not raise their equity capital
27 directly from investors, but rather do so as a consolidated entity.

28
29 **Q. Do you agree with the proposition that Chaparral City should be entitled to a size or**
30 **credit risk adjustment?**

1 A. No, I do not. As I indicated on pages 12-13 of my Direct Testimony, Chaparral City is a
2 subsidiary of EPCOR Utilities, Inc., which in turn is owned by the City of Edmonton.
3 Chaparral City does not have rated debt and, as a subsidiary of EPCOR Utilities, does not
4 have publicly-traded common stock and correspondingly have published risk factors such
5 as beta, Safety or financial strength from publications such as Value Line. In fact, even
6 Chaparral City's ultimate parent (i.e., City of Edmonton) does not have publicly-traded
7 stock.

8
9 As a result, Chaparral City's ratepayers should not be charged water rates which reflect in
10 incremental return to reflect the size of the Company. Such an increment is not justified
11 and not appropriate.

12
13 **Q. Can you provide any evidence that "size" or "Business Risk" Adjustments are not**
14 **generally recognized as risk factors in regulatory proceedings such as this one?**

15 A. Yes, I can. The table below reflects the average size (as measured by net plant) and
16 currently authorized returns on equity for various types of regulated utilities:

| Industry | Average Net Plant | Average Authorized ROE |
|-----------------------------|----------------------|---------------------------|
| Electric | \$16,273.7 | 10.46% |
| Combination Electric-Gas | \$14,732.8 | 10.37% |
| Natural Gas | \$3,961.9 | 10.59% |
| Water | \$2,323.2 | 9.97% |

25 Source: AUS Utility Reports, January 2014.

26
27 As this indicates, water utilities are the smallest type of utility, yet, they have the lowest
28 average authorized returns on equity. This is indicative that size, per se, should not
29 govern the level of return on equity.

1 **Q. Have the risks of the water proxy group changed since 2009?**

2 A. Yes, they have declined in a relative sense. I have prepared Exhibit ____ (DCP-2),
3 Schedule 4 to show a comparison of the risk indicators at the current time (as shown on
4 Exhibit ____ (DCP-1) Schedule 11 of my Direct Testimony) and in 2009. This indicates
5 that, of the four sets of risk indicators, three show declines in risk indicators from 2009 to
6 the present time.

7
8 **CREDIT RISK ADJUSTMENT PROPOSED BY MS. AHERN**

9 **Q. In her Rebuttal Testimony, Ms. Ahern continues to propose a “credit risk**
10 **adjustment” for Chaparral City. What is the basis of her proposal?**

11 A. Ms. Ahern’s credit risk adjustment is based upon her perception that Chaparral City
12 would have a lower credit rating than the proxy water utilities, if it had a credit rating. As
13 a result, she maintains that Chaparral City should have a higher cost of equity.

14
15 **Q. What is your response to Ms. Ahern’s assertion, on pages 68-69 of her Rebuttal**
16 **Testimony, that Chaparral City would have a Baa/BBB credit rating if it had rated**
17 **debt?**

18 A. This is speculation by Ms. Ahern. Her perceptions are apparently based on her statement
19 that Chaparral City’s immediate parent (i.e., EPCOR Water (USA)) has BBB+ ratings.

20
21 **Q. Have you found any indications that Chaparral City’s immediate parent – EPCOR**
22 **Water (USA) - has rated debt?**

23
24 A. No, I have not. Standard & Poor’s website does not identify EPCOR Water (USA) as an
25 entity that is rated by this organization.

26
27 In addition, in response to RUCO 6.04, which requested the credit ratings of Chaparral
28 City and its affiliates and owners(s), the only entity cited with credit ratings was EPCOR
29 Utilities, Inc.

1 **Q. Ms. Ahern states, on page 68 of her Rebuttal Testimony, that the “bond rating**
2 **agencies link the bond ratings of subsidiary companies with those of their parent**
3 **holding companies.” What are the ratings of EPCOR Utilities, Inc. the holding**
4 **company of Chaparral City?**

5 **A.** This information is contained in a June 2013 “Investor Presentation” of EPCOR Utilities,
6 Inc. Page 4 of this document cites the following:

7 “Stand alone credit is BBB+ (S&P) and A(low) (DBRS) – no credit support from
8 City”

9 As I note below these ratings incorporate a capital structure with a much lower ratio of
10 common equity than is maintained by Chaparral City.

11
12 **Q. Have you reviewed the basis for the BBB+ credit rating of EPCOR Utilities, Inc. by**
13 **Standard & Poor’s?**

14 **A.** Yes, I have. As noted above, the response to RUCO 6.04 listed the ratings of EPCOR
15 Utilities, Inc. One of the attachments to this response was a July 25, 2013 Standard &
16 Poor’s Research Update on EPCOR Utilities, Inc., titled “EPCOR Utilities Inc. Outlook
17 Revised to Positive on Strengthening Business Risk Profile; ‘BBB+’ Rating Affirmed,”
18 which is attached as Exhibit___(DCP-2) Schedule 5. In this report, Standard & Poor’s
19 noted the following:

20
21 **Rating Action**

22
23 On July 25, 2013, Standard & Poor’s Ratings Services revised its outlook
24 on Edmonton, Alta.-based EPCOR Utilities Inc. (EUI) to positive from
25 stable. At the same time, Standard & Poor’s affirmed its ‘BBB+’ long-
26 term corporate credit and senior unsecured debt ratings on the company.

27
28 The outlook revision reflects our view that EPCOR’s business risk profile
29 will continue to strengthen with the increasing proportion of cash flow
30 from its water and electricity transmission regulated businesses, along
31 with the continued sale of its investment in Capital Power L.P. (CPLP).
32
33
34
35

1 **Rationale**
2
3 ...

4
5 EUI's businesses include owning and operating water and waste water
6 treatment facilities and distribution infrastructure, electricity transmission
7 and distribution networks, and the provision of regulated rate option and
8 electricity supply services. The Company also provides other services to
9 Edmonton, including installation and maintenance of street lights, traffic
10 signals, and light rail transit.

11
12 EPCOR's business risk profile continues to strengthen as the proportion of
13 its cash flow from regulated businesses continues to increase. At present,
14 80% of the company's EBITDA is from its regulated electricity and water
15 services businesses. We forecast this to rise to 90% in the medium term as
16 EUI continues to follow its strategy of "wires and water." Overall, the
17 utility continues to operate at or above industry averages for operational
18 efficiency.

19
20 ...

21 **Outlook**
22

23
24 The positive outlook reflects our view that the increase of the regulated
25 water and electricity utility businesses in relation to the unregulated
26 businesses will continue to strengthen EPCOR's business risk profile.
27 EUI's strong operating performance further support this view.

28
29 We would likely raise the ratings if EPCOR continues its focus on
30 increasing the water and electricity utilities businesses while maintaining
31 adjusted FFO-to-debt of at least 14%.

32
33 This indicates that EPCOR Utilities, Inc. would likely have higher ratings in the absence
34 of its non-regulated operations. The negative impact of the non-regulated operations has
35 the effect of challenging Ms. Ahern's conclusion that Chaparral City (on a perceived
36 stand-alone basis) would have lower credit ratings than the proxy water utilities.

37
38 Standard & Poor's ratings for EPCOR Utilities, Inc. also need to be taken in the context
39 of the capital structure of this entity. As I have shown elsewhere in my Surrebuttal
40 Testimony, this entity has maintained common equity ratios of less than 60 percent,
41 which is substantially less than those of Chaparral City.

OTHER RESPONSES TO MS. AHERN'S REBUTTAL TESTIMONY

Q. On page 9, lines 5-13 of her Rebuttal Testimony, Ms. Ahern cites her "review of several representative Commission decisions from 2006 through 2013" in her discussion of the capital structure issue in this proceeding. Have you examined any "representative Commission decisions" with regard to the cost of common equity for water utilities?

A. Yes, I have. I have prepared Exhibit___(DCP-2), Schedule 6 to indicate the most recently Commission-awarded returns on equity for water utilities. As this indicates, the vast majority (i.e., 18 of 20) recently-authorized returns on equity for Arizona water utilities have been 10.0 percent or less.

CAPITAL STRUCTURE

Q. Are you aware that Staff Witness John A. Cassidy is proposing an adjustment to the Chaparral City capital structure in this proceeding?

A. Yes, I am. It is my understanding that Mr. Cassidy is proposing use of a hypothetical capital structure with 60 percent common equity and 40 percent long-term debt in place of the 83.4 percent common equity and 16.60 percent long-term debt proposed by Chaparral City. Ms. Ahern cites an 18.83 percent debt ratio (and implicit 81.17 percent common equity ratio) in her rebuttal to me on page 68 of her Rebuttal Testimony.

Q. How does the Staff's proposal differ from the capital structure you used in your Direct Testimony?

A. My Direct Testimony utilized the actual capital structure ratios of Chaparral City (Pages 2 and 15-16, as well as Schedule 1). I stated in my Direct Testimony (Pages 2 and 16) that "Chaparral City's capital structure contains significantly more equity (in percentage terms) than the proxy utilities used to estimate the cost of common equity. This is correspondingly a factor that should be considered in establishing the cost of equity in this proceeding." I note that my Direct Testimony did not make any adjustment to the Company's cost of common equity (or capital structure) to account for this "significantly more equity" that Chaparral City maintains, relative to the proxy water utilities.

1 **Q. Since your Direct Testimony was filed, have you become aware of any new**
2 **information that impacts the proper capital structure for Chaparral City?**

3 **A.** Yes, I have. In the process of preparing my Direct Testimony, I submitted (through
4 RUCO) a data request (RUCO 6.03) requesting the "capital structures of Chaparral City,
5 its affiliated companies and its parent(s)...for each year 2008-2012." Chaparral City's
6 response, attached as Exhibit__(DCP-2), Schedule 7, provided only balance sheets for
7 Chaparral City and no information for affiliated and parent(s) companies. RUCO
8 subsequently submitted a follow-up data request (RUCO 11.02) requesting the
9 information not provided in the response to RUCO 6.03. A copy of this response is
10 attached as Exhibit__(DCP-2), Schedule 8.

11
12 The information contained in this latter response reveals the following comparisons of the
13 respective common equity ratios of Chaparral City and its affiliated and parent
14 companies:

15

| Company | 2008 | 2009 | 2010 | 2011 | 2012 |
|-----------------------------|------|------|------|------|------|
| Chaparral City | 79% | 79% | 81% | 82% | 86% |
| EPCOR Utilities, Inc. | 46% | 57% | 59% | 58% | 54% |
| EPCOR Transmission Inc. | 34% | 38% | 37% | 40% | 32% |
| EPCOR Distribution Inc. | 39% | 41% | 42% | 39% | 41% |
| EPCOR Water Arizona | 38% | 38% | 38% | 40% | 39% |
| EPCOR Energy Alberta, Inc. | 36% | 40% | 40% | 24% | 40% |
| EPCOR Water Services Inc. | | | | | |
| (Edmonton & Region Water) | 38% | 41% | 42% | 42% | 40% |
| EPCOR Water Services Inc. | | | | | |
| (Edmonton Wastewater) | | 37% | 46% | 41% | 41% |
| EPCOR White Rock Water Inc. | -16% | -20% | -26% | -13% | -14% |
| EPCOR Water (West) Inc. | 35% | 7% | -1% | 29% | 28% |

16
17
18
19
20
21
22
23
24

25
26 It is obvious from the above comparison that Chaparral City stands out in stark contrast
27 to the other operations of EPCOR Utilities in terms of capital structure ratios. As noted
28 above, Chaparral City also has a significantly different common equity ratio than the
29 proxy companies employed to estimate the Company's cost of equity.

1 **Q. Do you believe that Mr. Cassidy's use of a hypothetical capital structure for**
2 **Chaparral City is a legitimate manner in which to recognize the Company's higher**
3 **common equity ratio versus that of other water utilities?**

4 A. Yes, I do. It apparent that Chaparral City's capital structure ratios are significantly higher
5 than both the proxy water utilities and the Company's affiliated and parent companies.
6 As a result, I do not believe that it is proper to use the Company's requested capital
7 structure in this proceeding.

8
9 **Q. What capital structure do you now propose for Chaparral City?**

10 A. I endorse the hypothetical capital structure proposed by Staff Witness Cassidy. This
11 contains 60 percent common equity and 40 percent common equity. I note that, even this
12 capital structure contains more common equity than is the case for the proxy group and
13 Chaparral City's affiliated and parent companies.

14
15 **Q. What is your proposed cost of capital recommendation using this capital structure?**

16 A. My cost of capital recommendation is as follows:
17

| <u>Capital Item</u> | <u>Percent</u> | <u>Cost</u> | <u>Wgt. Cost</u> |
|-----------------------|----------------|-------------|------------------|
| Debt | 40.00% | 5.92% | 2.37% |
| Common Equity | 60.00% | 9.35% | 5.61% |
| Total Cost of Capital | | | <u>7.98%</u> |

18
19
20 **Q. Does this conclude your Surrebuttal Testimony?**

21 A. Yes, it does.

McKinsey on Finance

Number 35,
Spring 2010

Perspectives on
Corporate Finance
and Strategy

2
Why value value?

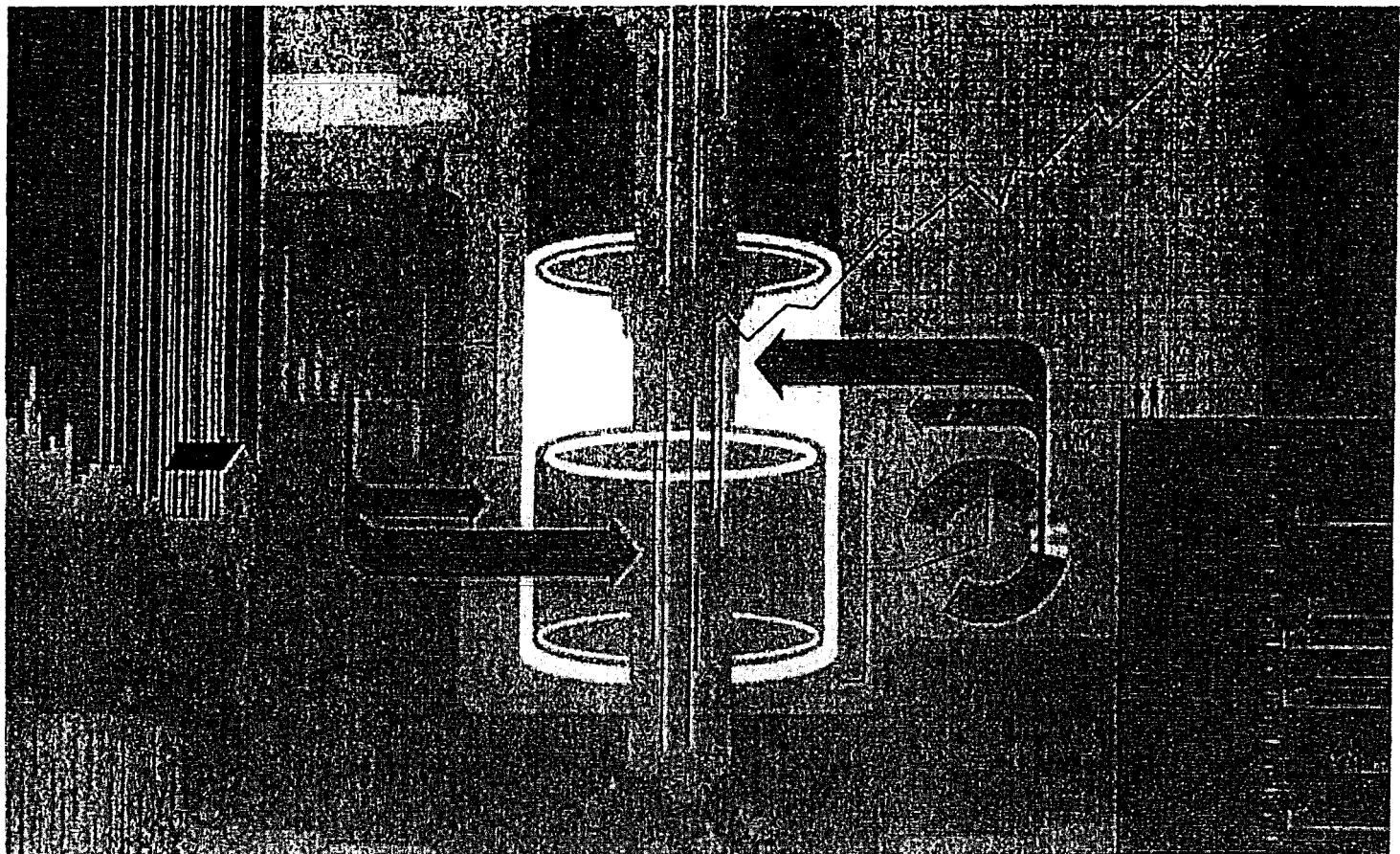
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Thinking longer
term during a
crisis: An interview
with Hewlett
Packard's CFO

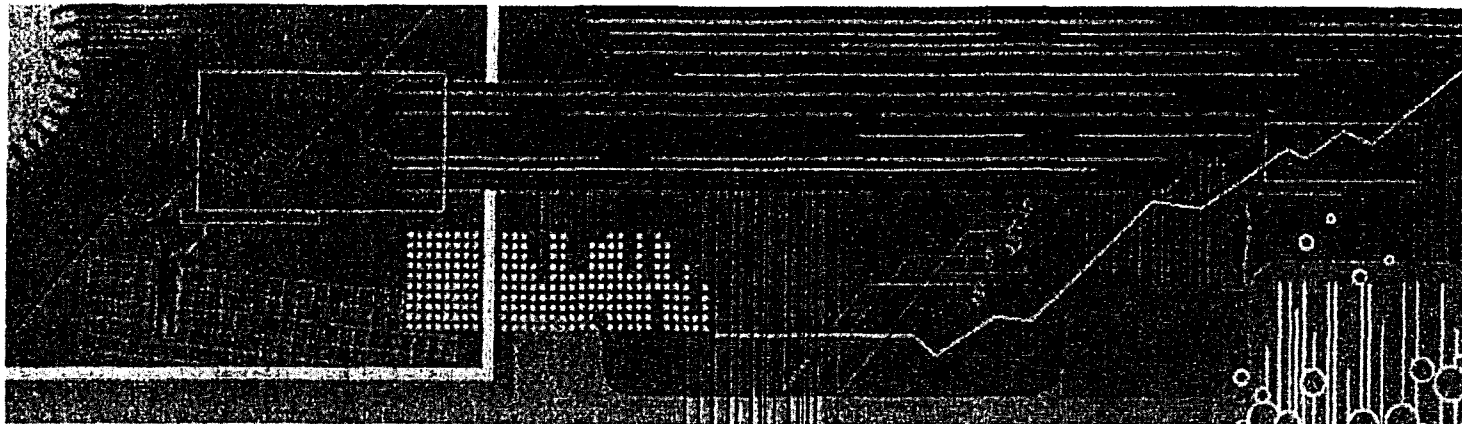
14
**Equity analysts:
Still too bullish**

18
Board directors and
experience: A
lesson from private
equity

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A better way to
measure bank risk

24
A new look at carbon
offsets





Equity analysts: Still too bullish

After almost a decade of stricter regulation, analysts' earnings forecasts continue to be excessively optimistic.

**Marc H. Goedhart,
Rishi Raj, and
Abhishek Saxena**

No executive would dispute that analysts' forecasts serve as an important benchmark of the current and future health of companies. To better understand their accuracy, we undertook research nearly a decade ago that produced sobering results. Analysts, we found, were typically overoptimistic, slow to revise their forecasts to reflect new economic conditions, and prone to making increasingly inaccurate forecasts when economic growth declined.¹

Alas, a recently completed update of our work only reinforces this view—despite a series of rules and regulations, dating to the last decade, that were intended to improve the quality of the

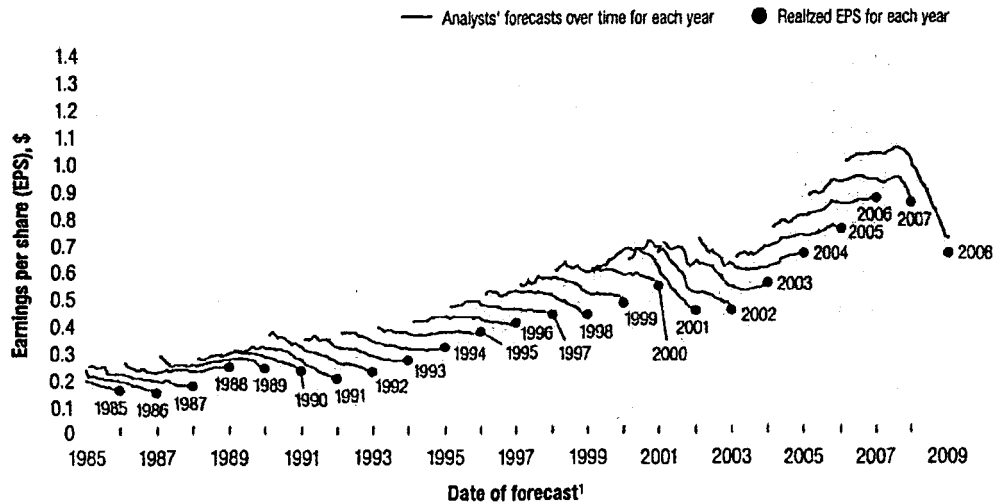
analysts' long-term earnings forecasts, restore investor confidence in them, and prevent conflicts of interest.² For executives, many of whom go to great lengths to satisfy Wall Street's expectations in their financial reporting and long-term strategic moves, this is a cautionary tale worth remembering.

Exceptions to the long pattern of excessively optimistic forecasts are rare, as a progression of consensus earnings estimates for the S&P 500 shows (Exhibit 1). Only in years such as 2003 to 2006, when strong economic growth generated actual earnings that caught up with earlier predictions, do forecasts actually hit the mark.

Exhibit 1
Off the mark

S&P 500 companies

With few exceptions, aggregate earnings forecasts exceed realized earnings per share.



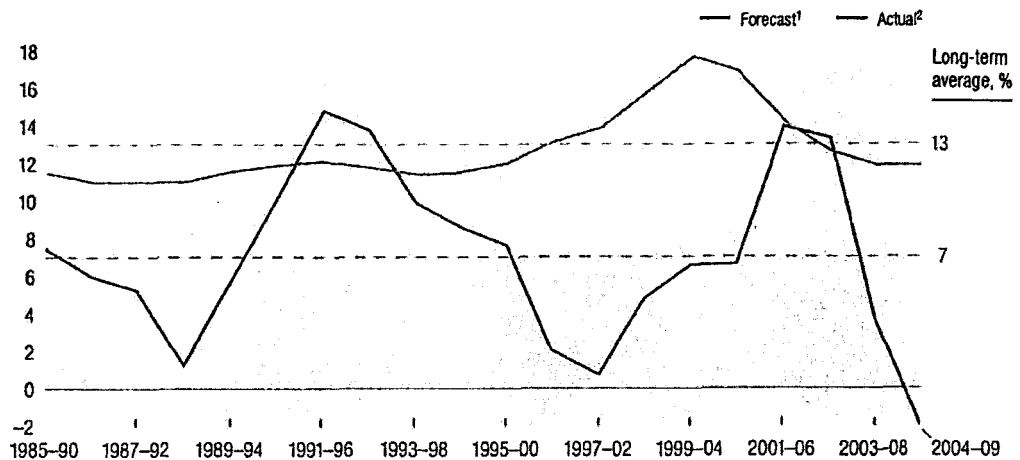
¹Monthly forecasts.

Source: Thomson Reuters I/B/E/S Global Aggregates; McKinsey analysis

Exhibit 2
Overoptimistic

**Earnings growth for S&P 500 companies,
5-year rolling average, %**

Actual growth surpassed forecasts only twice in 25 years—both times during the recovery following a recession.



¹Analysts' 5-year forecasts for long-term consensus earnings-per-share (EPS) growth rate. Our conclusions are same for growth based on year-over-year earnings estimates for 3 years.

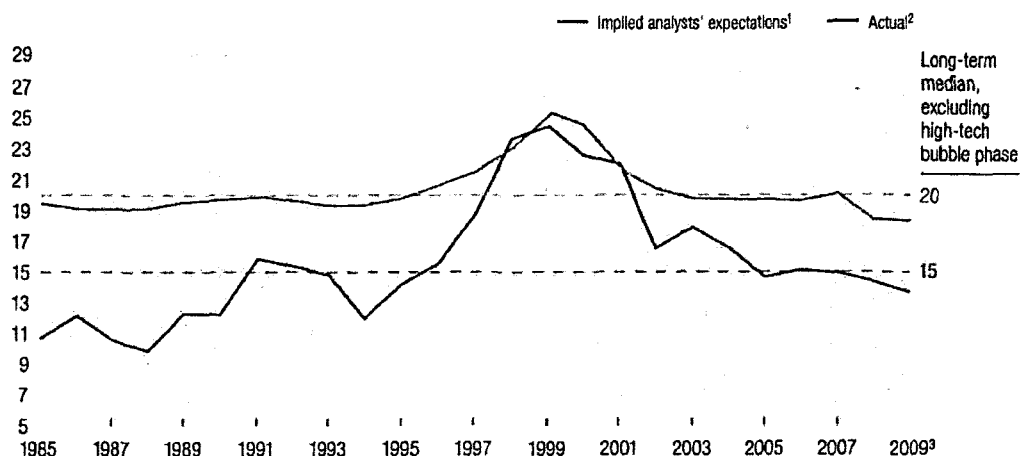
²Actual compound annual growth rate (CAGR) of EPS; 2009 data are not yet available, figures represent consensus estimate as of Nov 2009.

Source: Thomson Reuters I/B/E/S Global Aggregates; McKinsey analysis

Exhibit 3
Less giddy

Capital market expectations
are more reasonable.

**Actual P/E ratio vs P/E ratio implied by
analysts' forecasts, S&P 500 composite index**



¹ P/E ratio based on 1-year-forward earnings-per-share (EPS) estimate and estimated value of S&P 500. Estimated value assumes: for first 5 years, EPS growth rate matches analysts' estimates then drops smoothly over next 10 years to long-term continuing-value growth rate; continuing value based on growth rate of 6%; return on equity is 13.5% (long-term historical median for S&P 500), and cost of equity is 9.5% in all periods.

² Observed P/E ratio based on S&P 500 value and 1-year-forward EPS estimate.

³ Based on data as of Nov 2009.

Source: Thomson Reuters I/B/E/S Global Aggregates; McKinsey analysis

This pattern confirms our earlier findings that analysts typically lag behind events in revising their forecasts to reflect new economic conditions. When economic growth accelerates, the size of the forecast error declines; when economic growth slows, it increases.³ So as economic growth cycles up and down, the actual earnings S&P 500 companies report occasionally coincide with the analysts' forecasts, as they did, for example, in 1988, from 1994 to 1997, and from 2003 to 2006.

Moreover, analysts have been persistently overoptimistic for the past 25 years, with estimates ranging from 10 to 12 percent a year,⁴ compared with actual earnings growth of 6 percent.⁵

Over this time frame, actual earnings growth surpassed forecasts in only two instances, both during the earnings recovery following a recession (Exhibit 2). On average, analysts' forecasts have been almost 100 percent too high.⁶

Capital markets, on the other hand, are notably less giddy in their predictions. Except during the market bubble of 1999–2001, actual price-to-earnings ratios have been 25 percent lower than implied P/E ratios based on analyst forecasts (Exhibit 3). What's more, an actual forward P/E ratio⁷ of the S&P 500 as of November 11, 2009—14—is consistent with long-term earnings growth of 5 percent.⁸ This assessment is more

reasonable, considering that long-term earnings growth for the market as a whole is unlikely to differ significantly from growth in GDP,⁹ as prior McKinsey research has shown.¹⁰ Executives, as the evidence indicates, ought to base their strategic decisions on what they see happening in their industries rather than respond to the pressures of forecasts, since even the market doesn't expect them to do so.^o

¹ Marc H. Goedhart, Brendan Russell, and Zane D. Williams, "Prophets and profits," mckinseyquarterly.com, October 2001.

² US Securities and Exchange Commission (SEC) Regulation Fair Disclosure (FD), passed in 2000, prohibits the selective disclosure of material information to some people but not others. The Sarbanes-Oxley Act of 2002 includes provisions specifically intended to help restore investor confidence in the reporting of securities' analysts, including a code of conduct for them and a requirement to disclose knowable conflicts of interest. The Global Settlement of 2003 between regulators and ten of the largest US investment firms aimed to prevent conflicts of interest between their analyst and investment businesses.

³ The correlation between the absolute size of the error in forecast earnings growth (S&P 500) and GDP growth is -0.55.

⁴ Our analysis of the distribution of five-year earnings growth (as of March 2005) suggests that analysts forecast growth of more than 10 percent for 70 percent of S&P 500 companies.

⁵ Except 1998-2001, when the growth outlook became excessively optimistic.

⁶ We also analyzed trends for three-year earnings-growth estimates based on year-on-year earnings estimates provided by the analysts, where the sample size of analysts' coverage is bigger. Our conclusions on the trend and the gap vis-à-vis actual earnings growth does not change.

⁷ Market-weighted and forward-looking earnings-per-share (EPS) estimate for 2010.

⁸ Assuming a return on equity (ROE) of 13.5 percent (the long-term historical average) and a cost of equity of 9.5 percent—the long-term real cost of equity (7 percent) and inflation (2.5 percent).

⁹ Real GDP has averaged 3 to 4 percent over past seven or eight decades, which would indeed be consistent with nominal growth of 5 to 7 percent given current inflation of 2 to 3 percent.

¹⁰ Timothy Koller and Zane D. Williams, "What happened to the bull market?" mckinseyquarterly.com, November 2001.

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U.S. Securities and Exchange Commission

Analyzing Analyst Recommendations

Research analysts study publicly traded companies and make recommendations on the securities of those companies. Most specialize in a particular industry or sector of the economy. They exert considerable influence in today's marketplace. Analysts' recommendations or reports can influence the price of a company's stock—especially when the recommendations are widely disseminated through television appearances or through other electronic and print media. The mere mention of a company by a popular analyst can temporarily cause its stock to rise or fall—even when nothing about the company's prospects or fundamentals has recently changed.

Analysts often use a variety of terms—buy, strong buy, near-term or long-term accumulate, near-term or long-term over-perform or under-perform, neutral, hold—to describe their recommendations. But the meanings of these terms can differ from firm to firm. Rather than make assumptions, investors should carefully read the definitions of all ratings used in each research report. They should also consider the firm's disclosures regarding what percentage of all ratings fall into either "buy," "hold/neutral," and "sell" categories.

While analysts provide an important source of information in today's markets, investors should understand the potential conflicts of interest analysts might face. For example, some analysts work for firms that underwrite or own the securities of the companies the analysts cover. Analysts themselves sometimes own stocks in the companies they cover—either directly or indirectly, such as through employee stock-purchase pools in which they and their colleagues participate.

As a general matter, investors should not rely solely on an analyst's recommendation when deciding whether to buy, hold, or sell a stock. Instead, they should also do their own research—such as reading the prospectus for new companies or for public companies, the quarterly and annual reports filed with the SEC—to confirm whether a particular investment is appropriate for them in light of their individual financial circumstances. This alert discusses the potential conflicts of interest analysts face, describes the New York Stock Exchange (NYSE) and FINRA rules concerning analyst recommendations, and provides tips for researching investments.

Who Analysts Are and Who They Work for

Analysts historically have served an important role, promoting the efficiency of our markets by ferreting out facts and offering valuable insights on companies and industry trends. Analysts generally fall into one of three categories:

Sell-side analysts typically work for full-service broker-dealers and make recommendations on the securities they cover. Many of the more popular sell-side analysts work for prominent brokerage firms that also provide investment banking services for corporate clients—including companies whose securities the analysts cover.

Buy-side analysts typically work for institutional money managers—such as mutual funds, hedge funds, or investment advisers—that purchase securities for their own accounts. They counsel their employers on which securities to buy, hold, or sell and stand to make money when they make good calls.

Independent analysts typically aren't associated with firms that underwrite the securities they cover. They often sell their research reports on a subscription or other basis. Some firms that have discontinued their investment banking operations now market themselves as more independent than multi-service firms, emphasizing their lack of conflicts of interest.

Potential Conflicts of Interest

Many analysts work in a world with built-in conflicts of interest and competing pressures. On the one hand, sell-side firms want their individual investor clients to be successful over time because satisfied long-term investors are a key to a firm's long-term reputation and success. A well-respected investment research team is an important service to customers.

At the same time, however, several factors can create pressure on an analyst's independence and objectivity. The existence of these factors does not necessarily mean that the research analyst is biased. But investors should take them into account before making an investment decision. Some of these factors include:

- **Investment Banking Relationships**—When companies issue new securities, they hire investment bankers for advice on structuring the deal and for help with the actual offering. Underwriting a company's securities offerings and providing other investment banking services can bring in more money for firms than revenues from brokerage operations or research reports. Here's what an investment banking relationship may mean:

1. **The analyst's firm may be underwriting the offering**—If so, the firm has a substantial interest—both financial and with respect to its reputation—in assuring that the offering is successful. Analysts are often an integral part of the investment banking team for initial public offerings—assisting with "due diligence" research into the company, participating in investor road shows, and helping to shape the deal. Upbeat research reports and positive recommendations published after the offering is completed may "support" new stock issued by a firm's investment banking clients.
2. **Client companies prefer favorable research reports**—Unfavorable analyst reports may hurt the firm's efforts to

nurture a lucrative, long-term investment banking relationship. An unfavorable report might alienate the firm's client or a potential client and could cause a company to look elsewhere for future investment banking services.

3. **Positive reports attract new clients**—Firms must compete with one another for investment banking business. Favorable analyst coverage of a company may induce that company to hire the firm to underwrite a securities offering. A company might be unlikely to hire an underwriter to sell its stock if the firm's analyst has a negative view of the stock.
- **Brokerage Commissions**—Brokerage firms usually don't charge for their research reports. But a positive-sounding analyst report can help firms make money indirectly by generating more purchases and sales of covered securities—which, in turn, result in additional brokerage commissions.
- **Analyst Compensation**—Brokerage firms' compensation arrangements can put pressure on analysts to issue positive research reports and recommendations. For example, some firms link compensation and bonuses—directly or indirectly—to the number of investment banking deals the analyst lands or to the profitability of the firm's investment banking division.
- **Ownership Interests in the Company**—An analyst, other employees, and the firm itself may own significant positions in the companies an analyst covers. Analysts may also participate in employee stock-purchase pools that invest in companies they cover. And in a growing trend called "venture investing," an analyst's firm or colleagues may acquire a stake in a start-up by obtaining discounted, pre-IPO shares. These practices allow an analyst, the firm he or she works for, or both to profit, directly or indirectly, from owning securities in companies the analyst covers.

Disclosure and Recent Rule Changes

The rules of the NYSE and FINRA require analysts in some circumstances to disclose certain conflicts of interest when recommending the purchase or sale of a specific security. On May 10, 2002, the SEC approved proposed changes to these rules, strengthening the disclosures that analysts and firms must make. The NYSE and FINRA decided upon an implementation schedule of between 60 and 180 calendar days for the new rules in order to provide reasonable time periods for firms to develop and implement policies, procedures and systems to comply with the new requirements. These rules implement key structural reforms aimed at increasing analysts' independence and further managing conflicts of interest. They also require increased disclosure of conflicts in research reports and public appearances. Key provisions of the rules include the following:

- **No Promises of Favorable Research** — NYSE and FINRA rules now prohibit analysts from offering a favorable research rating or specific price target to induce investment banking business from companies. The rule changes also impose "quiet periods" that bar a firm that is acting as manager or co-manager of a

securities offering from issuing a report on a company within 40 days after an initial public offering or within 10 days after a secondary offering for an inactively traded company.

Significance of the Change: Promising research coverage to a company will not be as attractive if the research may not be issued within the initial days following the offering.

► **Limitations on Relationships and Communications**

— The rule changes prohibit research analysts from being supervised by the investment banking department. In addition, investment banking personnel are prohibited from discussing research reports with analysts prior to distribution, unless staff from the firm's legal/compliance department monitor those communications. Analysts are also prohibited from sharing draft research reports with the target companies, other than to check facts after approval from the firm's legal/compliance department.

Significance of the Change: These provisions help protect research analysts from influences that could impair their objectivity and independence.

- **Analyst Compensation** — The rule changes bar securities firms from tying an analyst's compensation to specific investment banking transactions. Furthermore, if an analyst's compensation is based on the firm's general investment banking revenues, that fact must be disclosed in the firm's research reports.

Significance of the Change: Prohibiting compensation from specific investment banking transactions significantly curtails a potentially major influence on research analysts' objectivity.

- **Firm Compensation** — The rule changes require a securities firm to disclose in a research report if it managed or co-managed a public offering of equity securities for the company or if it received any compensation for investment banking services from the company in the past 12 months. A firm also must disclose if it expects to receive or intends to seek compensation for investment banking services from the company during the next 3 months.

Significance of the Change: Requiring securities firms to disclose compensation from investment banking clients can alert investors to potential biases in their recommendations.

- **Restrictions on Personal Trading by Analysts** — The rule changes bar analysts and members of their households from investing in a company's securities

prior to its initial public offering if the company is in the business sector that the analyst covers. In addition, the rule changes require "blackout periods" that prohibit analysts from trading securities of the companies they follow for 30 days before and 5 days after they issue a research report about the company, and also prohibits analysts from trading against their most recent recommendations—subject to exceptions for unanticipated significant changes in the personal financial circumstances of the beneficial owner of a research analyst account.

Significance of the Change: Prohibiting analysts from trading around the time they issue research reports should reduce conflicts arising from personal financial interests.

- **Disclosures of Financial Interests in Covered Companies** — The rule changes require analysts to disclose if they own shares of recommended companies. Firms are also required to disclose if they own 1% or more of a company's equity securities as of the previous month end.

Significance of the Change: Requiring analysts and securities firms to disclose financial interests can alert investors to potential biases in their recommendations.

- **Disclosures in Research Reports Regarding the Firm's Ratings** — The rule changes require firms to clearly explain in research reports the meaning of all ratings terms they use, and this terminology must be consistent with its plain meaning. Additionally, firms must provide the percentage of all the ratings that they have assigned to buy / hold / sell categories and the percentage of investment banking clients in each category. Firms are also required to provide a graph or chart that plots the historical price movements of the security and indicates those points at which the firm initiated and changed ratings and price targets for the company.

Significance of the Change: These disclosures will assist investors in deciding what value to place on a securities firm's ratings and provide them with better information to assess its research.

- **Disclosures During Public Appearances by Analysts** — The rule changes require disclosures from analysts during public appearances, such as television or radio interviews. Guest analysts will have to disclose if they or their firm have a position in the stock; if the company is an investment banking client of the firm; if the analyst or a member of the analyst's household is an officer, director or advisory board member of the

recommended issuer; and other material conflicts.

Significance of the Change: This disclosure will inform investors who learn of analyst opinions and ratings through the media — rather than in written research reports — of analyst and firm conflicts.

What Conflicts May Mean to You

The fact that an analyst—or the analyst's firm—may have a conflict of interest does not mean that his or her recommendation is flawed or unwise. But it's a fact you should know and consider in assessing whether the recommendation is wise *for you*.

It's up to you to educate yourself to make sure that any investments you choose match your goals and tolerance for risk. Remember that analysts generally do not function as your financial adviser when they make recommendations—they're not providing individually tailored investment advice, and they're not taking your personal circumstances into consideration.

Uncovering Conflicts

In addition to paying close attention to the disclosures that firms and analysts make, here are some steps you can take to assess whether and to what extent analyst conflicts may exist:

Identify the Underwriter

Before you buy, confirm whether the analyst's firm underwrote a recommended company's stock by looking at the prospectus, which is part of the registration statement for the offering. Note that firms are required to disclose in research reports whether they managed or co-managed a public offering. You'll find a list of the lead or managing underwriters on the front cover of both the preliminary and final copies of the prospectus. By convention, the name of the lead underwriter—the firm that stands to make the most money on the deal—will appear first, and any co-managers will generally be listed second in alphabetical order. Other firms participating in the deal will be listed only in the "Underwriting" or "Plan of Distribution" sections of the final supplement to the prospectus. You can search for registration statements using the SEC's EDGAR database at www.sec.gov/edgar.shtml. The final supplement to the prospectus will appear in EDGAR as a "424" filing.

Research Ownership Interests

A company's registration statement and its annual report on Form 10-K will tell you who the beneficial owners of more than five percent of a class of equity securities are. Research reports on a company must disclose whether the securities firm issuing the report (or any of its affiliates) beneficially owns one percent or more of any class of common equity securities of the subject company. The issuer's registration statement will also tell you

about private sales of the company's securities during the past three years. In addition to the disclosure requirements in the new rules, you may be able to ascertain ownership by checking the following SEC forms:

- ▶ **Schedules 13D and 13G**—Any person who acquires a beneficial ownership of more than five percent must file a Schedule 13D. Schedule 13G is a much abbreviated version of Schedule 13D that is only available for use by a limited category of "persons," such as banks, broker-dealers, or insurance companies.
- ▶ **Forms 3, 4, and 5**—Officers, directors, and beneficial owners of more than 10 percent must report their holdings—and any changes in their holdings—to the SEC on Forms 3, 4, and 5.
- ▶ **Form 144**—If an analyst or a firm holds "restricted" securities from the company—meaning those acquired in an unregistered, private sale from the issuer or its affiliates—then investors can find out whether the analyst or the firm recently sold the stock by researching their Form 144 filings.

As of November 4, 2002, all statements of beneficial ownership on Schedules 13D and 13G (including those relating to the securities of foreign private issuers) must be submitted electronically using the SEC's EDGAR system. If you can't find a form on EDGAR, please refer to information on "How to Request Public Documents" at <http://www.sec.gov/answers/publicdocs.htm>. Or check the "Quotes" section of the Nasdaq Stock Market's website at <http://quotes.nasdaq.com/>

Unlock the Mystery of "Lock-ups"

If the analyst's firm acquired ownership interests through venture investing, the shares generally will be subject to a "lock-up" agreement during and after the issuer's initial public offering. Lock-up agreements prohibit company insiders—including employees, their friends and family, and venture capitalists—from selling their shares for a set period of time without the underwriter's permission. While the underwriter can choose to end a lock-up period early—whether because of market conditions, the performance of the offering, or other factors—lock-ups generally last for 180 days after the offering's registration statement becomes effective.

After the lock-up period ends, the firm may be able to sell the stock. If you're considering investing in a company that has recently conducted an initial public offering, you'll want to check whether a lock-up agreement is in effect and when it expires or if the underwriter waived any lock-up restrictions. This is important information because a company's stock price may be affected by the prospect of lock-up shares being sold into the market when the lock-up ends. It is also a data point you can

consider when assessing research reports issued just before a lock-up period expires—which are sometimes known as "booster shot" reports.

To find out whether a company has a lock-up agreement, check the "Underwriting" or "Plan of Distribution" sections of the prospectus. That's where companies must disclose that information. You can contact the company's shareholder relations department to ask for its prospectus, or use the SEC's EDGAR database if the company has filed its prospectus electronically. If you can't find a form on EDGAR, please refer to information on "How to Request Public Documents" at <http://www.sec.gov/answers/publicdocs.htm>. There are also commercial websites you can use for free that track when companies' lock-up agreements expire. The SEC does not endorse these websites and makes no representation about any of the information or services contained on these websites.

How You Can Protect Yourself

We advise all investors to do their homework before investing. If you purchase a security solely because an analyst said the company was one of his or her "top picks," you may be doing yourself a disservice. Especially if the company is one you've never heard of, take time to investigate:

- When assessing a firm's research report of a company, be sure to read all of the disclosures about the firm and analysts' conflicts of interest and the types of research recommendations that the firm has made.
- Research the company's financial reports using the SEC's EDGAR database at <http://www.sec.gov/edgar.shtml>, or call the company for copies. If you can't analyze them on your own, ask a trusted professional for help.
- Find out if a lock-up period is about to expire or whether the underwriter waived it. While that may not necessarily affect your decision to buy, it may put an analyst recommendation in perspective.
- Confirm whether the analyst's firm underwrote one of the company's recent stock offerings—especially its IPO.
- Learn as much as you can about the company by reading independent news reports, commercial databases, and reference books. Your local library may have these and other resources.
- Talk to your broker or financial adviser and ask questions about the company and its prospects. But bear in mind that if your broker's firm issued a positive report on a company, your broker will be hard-pressed to contradict it. Be sure to ask your broker whether a particular investment is suitable for you in light of your

financial circumstances.

Above all, always remember that even the soundest recommendation from the most trust-worthy analyst may not be a good choice for you. That's one reason we caution investors never to rely solely on an analyst's recommendation when buying or selling a stock. Before you act, ask yourself whether the decision fits with your goals, your time horizon, and your tolerance for risk. Know what you're buying—or selling—and why.

<http://www.sec.gov/investor/pubs/analysts.htm>

We have provided this information as a service to investors. It is neither a legal interpretation nor a statement of SEC policy. If you have questions concerning the meaning or application of a particular law or rule, please consult with an attorney who specializes in securities law.

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Modified: 08/30/2010

HOW TO INVEST IN COMMON STOCKS



A Guide to Using
THE VALUE LINE
INVESTMENT SURVEY

GLOSSARY

- Aaa Corporate Bond Rate**—the average yield on corporate bonds rated Aaa by Moody's Investors Service. Bonds that are rated Aaa are judged to be of the best quality.
- Accrual Accounting**—a method of matching income and expenses in the period they are actually applicable, regardless of the date of collection or payment.
- Adjustable-Rate Mortgage Loans (ARMs)** (Bank and Thrift Industries)—mortgage loans on which the interest rate charged by the lender is adjusted in accordance with a stipulated, publicly available cost-of-funds index, such as the yield on one-year Treasury bills. (*See Fixed-Rate Mortgage Loans.*)
- After market**—the market for replacement parts and accessories for a product or group of products. The Auto Parts (Replacement) Industry participates in the automotive after market.
- After-Tax Corporate Profits**—*see Corporate Profits.*
- AFUDC**—*see Allowance for Funds Used During Construction.*
- Allowance for Funds Used During Construction** (Electric Utility Industries)—a non cash credit to income consisting of equity and debt components. This non cash income results from construction work in progress and is expected to be converted into cash income at a future date.
- American Depositary Receipts (ADRs)**—since most other nations do not allow stock certificates to leave the country, a foreign company will arrange for a trustee (typically a large bank) to issue ADRs (sometimes called American Depositary Shares, or ADSs) representing the actual, or underlying, shares. Each ADR is equivalent to a specified number of shares (the ratio is shown in a footnote on the Value Line page).
- American Stock Exchange Composite**—a market-capitalization weighted index of the prices of the stocks traded on the American Stock Exchange.
- Annual Change D-J Industrials** (Investment Companies)—the annual change from year end to year end in the Dow Jones Industrial Average, expressed as a percentage.
- Annual Change in Net Asset Value** (Investment Companies)—the change in percentage terms of the net asset value per share at the end of any given year from what it was at the end of the preceding year, adjusted for any capital gains distributions made during the year.
- Annual Rates of Change (Per Share)**—compounded annual rates of change of per-share sales, cash flow, earnings, dividends, and book value (or other industry-specific per-share figures) over the past ten years and five years and estimated over the coming three to five years. All forecasted rates of change are computed from the average figure for the past three-year period to an average for a future three-year period. If data for a three-year base period are not available, a two- or one-year base may be used.
- Annual Total Return**—the capital gain or loss plus the sum of dividend disbursements expected over the next three to five years, all divided by the recent price and expressed as an average annual rate.
- Arbitrage**—the simultaneous purchase of an asset in one market and sale of the same asset, or assets equivalent to the asset purchased, in another market. Often referred to as "classical arbitrage," this type of transaction should result in a risk-free profit. Risk Arbitrage refers to transactions in stocks involved in takeover activity.
- Arbitrageur**—a person or organization that engages in arbitrage activity.
- Arithmetic Average**—a simple mean. Items to be averaged are added and their sum is divided by the number of items. The result is an arithmetic, or simple, average (or mean).
- ARM**—*see Adjustable-Rate Mortgage Loans.*

COMPARISON OF RISK INDICATORS FOR WATER PROXY GROUP IN 2009 AND 2013

| Company | <u>Value Line Safety</u> | | <u>Value Line Beta</u> | | <u>Value Line Financial Strength</u> | | <u>Standard & Poor's Stock Ranking</u> | |
|---|--------------------------|------|------------------------|------|--------------------------------------|--------|--|------|
| | 2009 | 2014 | 2009 | 2014 | 2009 | 2014 | 2009 | 2014 |
| American States Water Company | 3 | 2 | 0.95 | 0.65 | B++ | A | B+ | A- |
| American Water Works Company | | 3 | | 0.65 | | B+ | | |
| Aqua America Inc. | 3 | 2 | 0.90 | 0.60 | B+ | B++ | A | A |
| Artesian Resources Corp. | | 3 | | 0.55 | | B | | A- |
| California Water Service, Inc. | 2 | 3 | 1.05 | 0.60 | B++ | B++ | B+ | A- |
| Middlesex Water | 2 | 2 | 0.80 | 0.75 | B+ | B++ | B+ | A- |
| SJW Corporation | 3 | 3 | 1.05 | 0.85 | B+ | B+ | A- | B+ |
| York Water Co. | 2 | 2 | 0.65 | 0.70 | B++ | B+ | B+ | A |
| Average -- All Companies | 2.5 | 2.5 | 0.90 | 0.67 | B+/B++ | B+/B++ | B+/A- | A- |
| Average -- excl Am Water Works and Artesian Resources. | 2.5 | 2.33 | 0.90 | 0.69 | B+/B++ | B+/B++ | B+/A- | A- |

Sources: Value Line Investment Survey and Standard & Poor's Stock Guide, 2009 and 2014.

RatingsDirect®

Research Update:

EPCOR Utilities Inc. Outlook Revised To Positive On Strengthening Business Risk Profile; 'BBB+' Rating Affirmed

Primary Credit Analyst:

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Research Update:

EPCOR Utilities Inc. Outlook Revised To Positive On Strengthening Business Risk Profile; 'BBB+' Rating Affirmed

Overview

- We are revising our outlook on EPCOR Utilities Inc. to positive from stable.
- We are also affirming our 'BBB+' long-term corporate credit and senior unsecured debt ratings on the company.
- We base the outlook revision on our view of EPCOR's strengthening business risk profile.

Rating Action

On July 25, 2013, Standard & Poor's Ratings Services revised its outlook on Edmonton, Alta.-based EPCOR Utilities Inc. (EUI) to positive from stable. At the same time, Standard & Poor's affirmed its 'BBB+' long-term corporate credit and senior unsecured debt ratings on the company.

The outlook revision reflects our view that EPCOR's business risk profile will continue to strengthen with the increasing proportion of cash flow from its water and electricity transmission regulated businesses, along with the continued sale of its investment in Capital Power L.P. (CPLP).

Rationale

The ratings on EUI reflect Standard & Poor's view of the company's "strong" business risk profile and "significant" financial risk profile (as per our criteria).

EUI's stand-alone credit profile is 'bbb+'. Standard & Poor's 'BBB+' long-term corporate credit rating on the company reflects its criteria for government-related entities, and its view of a "low" likelihood of extraordinary government support weighting the following assessments:

- EPCOR's "limited importance" based on our criteria as a provider of electricity transmission and distribution and water and wastewater to Edmonton, a service that a private-sector entity could undertake; and
- Its "limited" link with the government, given the company's ever-increasing operations outside of the city.

EUI's businesses include owning and operating water and waste water treatment facilities and distribution infrastructure, electricity transmission and

distribution networks, and the provision of regulated rate option and electricity supply services. The company also provides other services to Edmonton, including installation and maintenance of street lights, traffic signals, and light rail transit.

EPCOR's business risk profile continues to strengthen as the proportion of its cash flow from regulated businesses continues to increase. At present, 80% of the company's EBITDA is from its regulated electricity and water services businesses. We forecast this to rise to 90% in the medium term as EUI continues to follow its strategy of "wires and water." Overall, the utility continues to operate at or above industry averages for operational efficiency.

Although EPCOR has access to capital markets to fund acquisitions and its development activities, it still relies in part on its ability to sell its investment in CPLP to fund the equity portion. To date, EUI has been able to make a number of sales and has significantly reduced its investment in Capital Power to the current 29%. We forecast this trend to continue; in addition to providing the equity for such acquisitions and development, this reduces its exposure to the higher-risk generation segment.

Liquidity

We believe EPCOR has adequate liquidity as per our criteria. Sources divided by uses will exceed 1.2x over the next 12 months. Our assessment incorporates the following expectations and assumptions:

- The company continues to have solid relationships with its banks, a generally high standing in credit markets, and generally very prudent risk management.
- Liquidity sources include forecast funds from operations (FFO; including distributions from CPLP) of approximately C\$300 million in the next 12 months and undrawn available committed facilities of about C\$500 million.
- Uses of liquidity in the next 12 months include committed capital spending of about C\$350 million, C\$18 million in debt maturities, and C\$141 million in shareholder distributions.
- As of March 31, 2013, EUI complied with its covenants.

In addition, the company has a committed bank facility expressly for letters of credit (LCs). Accordingly, we do not add the extra liquidity for this facility but do not reduce other bank facility availability for LCs.

Outlook

The positive outlook reflects our view that the increase of the regulated water and electricity utilities businesses in relation to the unregulated businesses will continue to strengthen EPCOR's business risk profile. EUI's strong operating performance further support this view.

We would likely raise the ratings if EPCOR continues its focus on increasing the water and electricity utilities businesses while maintaining adjusted

FFO-to-debt of at least 14%.

A negative rating action is possible during our two-year outlook period if adjusted FFO-to-debt falls and stays below 10%-12%. This could occur if the company decides to pursue a large acquisition or development project funded with large amounts of debt.

Related Criteria And Research

- Methodology: Management And Governance Credit Factors For Corporate Entities And Insurers, Nov. 13, 2012
- Methodology: Business Risk/Financial Risk Matrix Expanded, Sept. 18, 2012
- Methodology And Assumptions: Liquidity Descriptors For Global Corporate Issuers, Sept. 28, 2011
- Rating Government-Related Entities: Methodology And Assumptions, Dec. 9, 2010
- Key Credit Factors: Business And Financial Risks In The Investor-Owned Utilities Industry, Nov. 26, 2008
- 2008 Corporate Criteria: Analytical Methodology, April 15, 2008
- 2008 Corporate Criteria: Ratios And Adjustments, April 15, 2008

Ratings List

EPCOR Utilities Inc.

Outlook Revised To Positive

| | To | From |
|-------------------------|------------------|----------------|
| Corporate credit rating | BBB+/Positive/-- | BBB+/Stable/-- |

Rating Affirmed

| | |
|-----------------------|------|
| Senior unsecured debt | BBB+ |
|-----------------------|------|

Complete ratings information is available to subscribers of RatingsDirect at www.globalcreditportal.com and at www.spcapitaliq.com. All ratings affected by this rating action can be found on Standard & Poor's public Web site at www.standardandpoors.com. Use the Ratings search box located in the left column.

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McGRAW-HILL

**RECENT AUTHORIZED RETURNS ON COMMON EQUITY
FOR ARIZONA WATER UTILITIES**

| Utility | Decision | Date | Return on Equity |
|---|---------------------------------|------------|------------------|
| Far West Water & Sewer, Inc. | ROO only | 8/29/2013 | 9.50% |
| Arizona Water Company -- Northern Group (2 systems) | Settlement Agreement | 8/27/2013 | 10.00% |
| Rio Rico Utilities, Inc. | 73996 | 7/30/2013 | |
| Water | | | 9.20% |
| Waste Water | | | 9.20% |
| Arizona Water Company -- Eastern Group (6 systems) | 73736 | 2/20/2013 | 10.55% |
| Pima Utility Company | 73573 | 11/21/2012 | 9.49% |
| AZ-American Water Co. (3 systems) | 73145 | 5/2/2012 | 10.60% |
| Arizona Water Company -- Western Group (3 systems) | 73144 approved settlement | 5/1/2012 | 10.00% |
| GoodmanWater Company | 72897 | 2/21/2012 | NA |
| Rio Rico Utilities, Inc. | 72059 | 1/6/2011 | |
| Water | | | 9.50% |
| Waste Water | | | 9.50% |
| Litchfield Park Service Co. | 72026 | 12/10/2010 | |
| Water | | | 8.01% |
| Waste Water | | | 8.01% |
| Global Utilities | 71878 | 9/14/2010 | |
| Palo Verde | | | 9.00% |
| Valencial/Gr. Buckeye | | | 9.00% |
| WUGT | | | N/A |
| Willow | | | 9.00% |
| Santa Cruz | | | 9.00% |
| Valencial/Town | | | 9.00% |
| Arizona Water Company (17 systems) | 71845 | 8/25/2010 | 9.50% |
| Litchfield Park Service Co. | Application Filed | | |
| Water | | | 9.20% |
| Waste Water | | | 9.20% |

Source: Information compiled by RUCO from Arizona Corporation Commission decisions.

COMPANY: CHAPARRAL CITY WATER COMPANY
DOCKET NO: W-02113A-13-0118

Response provided by: Sheryl L. Hubbard
Title: Director, Regulatory & Rates

Address: 2355 W. Pinnacle Peak Road, Suite 300
Phoenix, AZ 85027

Company Response Number: RUCO 6.03

- Q: Please provide a schedule that shows the capital structures of Chaparral City, its affiliated companies and its parent(s) (including short-term debt, long-term debt, preferred stock and common equity) for each year 2008 to 2012.
- A: A schedule of the capital structures of Chaparral City Water Company does not exist. In lieu of a schedule, the balance sheets containing the year end balances of short-term debt, long-term debt, preferred stock, and common equity for each year 2008 to 2012 are attached.

COMPANY: CHAPARRAL CITY WATER COMPANY
DOCKET NO: W-02113A-13-0118

Response provided by: Sheryl L. Hubbard
Title: Director, Regulatory & Rates

Address: 2355 W. Pinnacle Peak Road, Suite 300
Phoenix, AZ 85027

Company Response Number: 11.02

Q: Capital Structure – This is a follow-up to RUCO data request 6.3 which asked the following:

"Please provide a schedule that shows the capital structures of Chaparral City, its affiliated companies and its parent(s) (including short-term debt, long-term debt, preferred stock and common equity) for each year 2008 to 2012."

The Company responded by stating:

"A schedule of the capital structures of Chaparral City Water Company does not exist. In lieu of a schedule, the balance sheets containing the year end balances of short-term debt, long-term debt, preferred stock, and common equity for each year 2008 to 2012 are attached."

Thank you for the information you provided, however it is not fully responsive to RUCO's data request.

Please provide the following information:

- a. The Capital Structure of EPCOR's parent company in Canada, EPCOR Utilities Inc. As part of your response, include the short-term debt, long-term debt, preferred stock, and common equity for the years 2008 through 2013, as a dollar amount and as a percentage of the total capital structure.
 - b. The Capital Structure of EPCOR Water Arizona Inc.'s individual districts (e.g. Anthem, Sun City, Sun City West etc.) As part of your response, include the short-term debt, long-term debt, preferred stock, and common equity for the years 2008 through 2013, as a dollar amount and as a percentage of the total capital structure.
 - c. The Capital Structure of any other affiliated companies (e.g. EPCOR White Rock Water Inc.) As part of your response, include the short-term debt, long-term debt, preferred stock, and common equity for the years 2008 through 2013, as a dollar amount and as a percentage of the total capital structure.
- A.
- a. Please see attachment labeled "RUCO 11.02 a. Capital Structure-EUI EDTI.xlsx".
 - b. Please see attachment labeled "RUCO 11.02 b. Capital Structure-EPCOR Water AZ.xlsx".
 - c. Please see attachment labeled "RUCO 11.02 c. Capital Structure-CCWC Affiliates.xlsx".

IA PARRAL CITY WATER COMPANY
 DOCKET NO. W-02113A-13-0118

RESPONSE TO DATA REQUEST NO. RUCO 11.02 a.

EPCOR Utilities Inc.
Year End Capital Structure 2008-2012
 (In millions of dollars)

| | CDN GAAP | | CDN GAAP | | IFRS | | IFRS | | IFRS | |
|-----------------------------|--------------|-------------|--------------|-------------|--------------|-------------|--------------|-------------|--------------|-------------|
| | 2008 | | 2009 | | 2010 | | 2011 | | 2012 | |
| | \$ | % | \$ | % | \$ | % | \$ | % | \$ | % |
| Short term debt | 166 | 3% | 225 | 5% | 219 | 5% | 17 | 0% | 14 | 0% |
| Long term debt | 2,702 | 51% | 1,692 | 39% | 1,453 | 36% | 1,682 | 42% | 1,956 | 47% |
| Preferred shares | - | - | - | - | - | - | - | - | - | - |
| Common shares | 24 | 0% | 24 | 1% | 24 | 1% | 24 | 1% | 24 | 1% |
| Retained Earnings/(Deficit) | 2,429 | 46% | 2,446 | 56% | 2,318 | 58% | 2,327 | 57% | 2,210 | 53% |
| Total | 5,321 | 100% | 4,387 | 100% | 4,014 | 100% | 4,050 | 100% | 4,204 | 100% |

EPCOR Transmission Inc.
Year End Capital Structure 2008-2012
 (In millions of dollars)

| | 2008 | | 2009 | | 2010 | | 2011 | | 2012 | |
|-----------------------------|------------|-------------|------------|-------------|------------|-------------|------------|-------------|------------|-------------|
| | \$ | % | \$ | % | \$ | % | \$ | % | \$ | % |
| Short term debt | 2 | 1% | - | 0% | 32 | 9% | (2) | -1% | 116 | 25% |
| Long term debt | 181 | 65% | 184 | 62% | 182 | 54% | 205 | 61% | 203 | 43% |
| Preferred shares | - | 0% | - | 0% | - | 0% | - | - | - | - |
| Common shares | 63 | 22% | 72 | 24% | 72 | 21% | 72 | 21% | 72 | 15% |
| Retained Earnings/(Deficit) | 34 | 12% | 42 | 14% | 53 | 16% | 63 | 19% | 77 | 17% |
| Total | 280 | 100% | 298 | 100% | 339 | 100% | 338 | 100% | 468 | 100% |

EPCOR Distribution Inc.
Year End Capital Structure 2008-2012
 (In millions of dollars)

| | 2008 | | 2009 | | 2010 | | 2011 | | 2012 | |
|-----------------------------|------------|-------------|------------|-------------|------------|-------------|------------|-------------|------------|-------------|
| | \$ | % | \$ | % | \$ | % | \$ | % | \$ | % |
| Short term debt | 3 | 1% | 6 | 1% | 41 | 8% | 40 | 7% | 17 | 3% |
| Long term debt | 272 | 61% | 277 | 57% | 272 | 51% | 341 | 55% | 370 | 57% |
| Preferred shares | - | 0% | - | 0% | - | 0% | - | - | - | - |
| Common shares | 128 | 29% | 152 | 31% | 152 | 28% | 152 | 25% | 166 | 26% |
| Retained Earnings/(Deficit) | 45 | 10% | 50 | 10% | 70 | 13% | 85 | 14% | 98 | 15% |
| Total | 449 | 100% | 486 | 100% | 535 | 100% | 619 | 100% | 652 | 100% |

RESPONSE TO DATA REQUEST NO. RUCO 11.02 b.

EPCOR Water Arizona
Capital Structure 2008-2012
(In thousands of dollars)

| | 2008 | | 2009 | | 2010 | | 2011 | | 2012 | |
|------------------|---------|------|---------|-----|---------|------|---------|------|---------|------|
| | \$ | % | \$ | % | \$ | % | \$ | % | \$ | % |
| Long-term debt | 194,768 | 48% | 184,112 | - | 195,565 | 47% | 195,454 | 48% | 240,337 | 61% |
| Short-term debt | 57,941 | 14% | 69,340 | 17% | 60,318 | 15% | 49,090 | 12% | - | 0% |
| Preferred shares | - | - | - | - | - | - | - | - | - | - |
| Common Equity | 154,506 | 38% | 154,666 | 38% | 156,292 | 38% | 160,704 | 40% | 152,248 | 39% |
| Total | 407,215 | 100% | 408,119 | 55% | 412,175 | 100% | 405,249 | 100% | 392,586 | 100% |

Notes:

During the years 2008 - 2011, EPCOR Water AZ was owned by American Water Company

RESPONSE TO DATA REQUEST NO. RUCO 11.02 c.

EPCOR Energy Alberta Inc.
Capital Structure 2008-2012
(In thousands of dollars)

| | 2008 | | 2009 | | 2010 | | 2011 | | 2012 | |
|-----------------------------|----------|------|----------|------|----------|------|----------|------|----------|------|
| | \$ | % | \$ | % | \$ | % | \$ | % | \$ | % |
| Short term debt | 1,349 | 1% | - | - | - | - | 31,894 | 23% | - | - |
| Long term debt | 73,958 | 63% | 73,958 | 60% | 73,958 | 59% | 73,958 | 53% | 73,958 | 60% |
| Preferred shares | - | - | - | - | - | - | - | - | - | - |
| Common shares | 101,257 | 86% | 101,257 | 83% | 86,257 | 69% | 70,257 | 50% | 70,257 | 57% |
| Retained Earnings/(Deficit) | (58,707) | -50% | (52,818) | -43% | (35,626) | -29% | (35,872) | -26% | (20,792) | -17% |
| Total | 117,857 | 100% | 122,397 | 100% | 124,589 | 100% | 140,237 | 100% | 123,423 | 100% |

Notes:

EEAI provides services to regulated and non-regulated customers.

For the years requested the regulatory earnings of EEA are return on approved cost of service, not return on rate base.

The information provided is for EEA as a whole (regulated and non-regulated) and is taken from the audited EEA financial statements for the particular year.

Values reflect old CGAAP to 2010 and IFRS thereafter.

RESPONSE TO DATA REQUEST NO. RUCO 11.02 c.

EPCOR Water Canada - Regulated Entities
Capital Structure 2008-2012 - End of Year Balances
(in thousands of dollars)

EPCOR Water Services Inc. (Edmonton & Region Water - Including Fire Protection & Wholesale Water)

| | 2008 | | 2009 | | 2010 | | 2011 | | 2012 | |
|-----------------------------|---------|------|---------|------|---------|------|---------|------|---------|------|
| | \$ | % | \$ | % | \$ | % | \$ | % | \$ | % |
| Short term debt | 30,720 | 5% | 15,115 | 2% | 4,188 | 1% | 13,468 | 2% | 32,630 | 4% |
| Long term debt | 391,893 | 58% | 409,601 | 57% | 427,158 | 57% | 445,991 | 56% | 483,975 | 57% |
| Equity: | | | | | | | | | | |
| Preferred shares | - | 0% | - | 0% | - | - | - | - | - | - |
| Common shares | - | 0% | - | 0% | - | - | - | - | - | - |
| Retained Earnings/(Deficit) | 258,912 | 38% | 290,071 | 41% | 315,984 | 42% | 330,882 | 42% | 337,811 | 40% |
| Total | 581,526 | 100% | 714,787 | 100% | 747,331 | 100% | 790,341 | 100% | 854,416 | 100% |

EPCOR Water Services Inc. (Edmonton Wastewater)

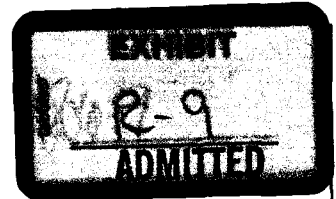
| | 2008 | | 2009 | | 2010 | | 2011 | | 2012 | |
|-----------------------------|---------|------|---------|------|---------|------|---------|------|---------|------|
| | \$ | % | \$ | % | \$ | % | \$ | % | \$ | % |
| Short term debt | 40,189 | 17% | 38,729 | 15% | 39,585 | 15% | 32,790 | 12% | 127,132 | 47% |
| Long term debt | 105,435 | 46% | 99,408 | 39% | 113,520 | 44% | 127,132 | 47% | 127,132 | 47% |
| Equity: | | | | | | | | | | |
| Preferred shares | - | - | - | - | - | - | - | - | - | - |
| Contributed surplus | 82,082 | 36% | 106,832 | 42% | 92,332 | 36% | 90,082 | 34% | 90,082 | 34% |
| Retained Earnings/(Deficit) | 3,079 | 1% | 8,973 | 4% | 13,618 | 5% | 17,954 | 7% | 17,954 | 7% |
| Total | 230,784 | 100% | 253,941 | 100% | 259,154 | 100% | 267,957 | 100% | 267,957 | 100% |

EPCOR White Rock Water Inc. (Regulated & Non-Regulated Operations)

| | 2008 | | 2009 | | 2010 | | 2011 | | 2012 | |
|-----------------------------|---------|------|---------|------|---------|------|---------|------|---------|------|
| | \$ | % | \$ | % | \$ | % | \$ | % | \$ | % |
| Short term debt | 4,272 | 36% | 4,584 | 39% | 5,505 | 46% | 4,546 | 36% | 5,958 | 44% |
| Long term debt | 9,600 | 80% | 9,600 | 81% | 9,600 | 80% | 9,600 | 76% | 9,600 | 71% |
| Equity: | | | | | | | | | | |
| Preferred shares | - | - | - | - | 0 | 0% | 0 | 0% | 0 | 0% |
| Contributed surplus | 0 | 0% | 0 | 0% | 0 | 0% | 2,000 | 16% | 2,000 | 15% |
| Retained Earnings/(Deficit) | (1,873) | -16% | (2,310) | -20% | (3,155) | -26% | (3,586) | -29% | (3,985) | -29% |
| Total | 11,999 | 100% | 11,854 | 100% | 11,951 | 100% | 12,560 | 100% | 13,574 | 100% |

EPCOR Water (West) Inc. (Regulated & Non-Regulated Operations)

| | 2008 | | 2009 | | 2010 | | 2011 | | 2012 | |
|-----------------------------|-------|------|-------|------|-------|------|-------|------|-------|------|
| | \$ | % | \$ | % | \$ | % | \$ | % | \$ | % |
| Short term debt | 90 | 2% | 1,354 | 35% | 3,014 | 59% | 1,127 | 25% | 3,024 | 44% |
| Long term debt | 2,352 | 62% | 2,272 | 59% | 2,187 | 42% | 2,098 | 46% | 2,004 | 29% |
| Preferred shares | - | - | - | - | - | - | - | - | - | - |
| Equity: | | | | | | | | | | |
| Contributed surplus | - | 0% | - | 0% | - | 0% | 1,800 | 40% | 1,800 | 26% |
| Retained Earnings/(Deficit) | 1,342 | 35% | 257 | 7% | (54) | -1% | (493) | -11% | 120 | 2% |
| Total | 3,784 | 100% | 3,883 | 100% | 5,147 | 100% | 4,532 | 100% | 6,948 | 100% |



BEFORE THE ARIZONA CORPORATION COMMISSION

COMMISSIONERS

MIKE GLEASON, Chairman
WILLIAM A. MUNDELL
JEFF HATCH-MILLER
KRISTIN K. MAYES
GARY PIERCE

IN THE MATTER OF THE APPLICATION OF
CHAPARRAL CITY WATER COMPANY, INC.,
AN ARIZONA CORPORATION, FOR A
DETERMINATION OF THE FAIR VALUE OF
ITS UTILITY PLANT AND PROPERTY AND
FOR INCREASES IN ITS RATES AND
CHARGES FOR UTILITY SERVICE BASED
THEREON.

DOCKET NO. W-02113A-07-0551

**STAFF'S NOTICE OF FILING
SURREBUTTAL TESTIMONY**

Staff of the Arizona Corporation Commission ("Staff") hereby files the Surrebuttal Testimony
of David C. Parcell of Technical Associates, Inc. in the above-referenced matter.

RESPECTFULLY SUBMITTED this 3rd day of December, 2008.

Robin Mitchell, Staff Attorney
Amanda Ho, Staff Attorney
Wesley Van Cleve, Staff Attorney
Arizona Corporation Commission
1200 West Washington Street
Phoenix, Arizona 85007

Original and thirteen (13) copies of the
foregoing filed this 3rd day of
December, 2008 with:

Docket Control
Arizona Corporation Commission
1200 West Washington
Phoenix, AZ 85007

DEC 4 3 30 PM '08

RECEIVED

1 **Q. Please describe, in detail, using your professional judgment, how you arrived at a**
2 **10.0 percent cost of equity for Chaparral, without adjusting for financial risk.**

3 A. I have accepted the proxy group from the Staff Testimony (as does Chaparral). I have
4 also accepted the 9.3 percent DCF conclusion in the Staff Testimony, although I note that
5 the multi-stage DCF may slightly over-state the second-stage growth rate. I generally
6 adopt the historical risk premium CAPM of the Staff Testimony (11.2 percent) but I do
7 not agree with: (1) use of only arithmetic averages in deriving the risk premium, rather
8 preferring to use both arithmetic and geometric averages; and, (2) using only the income
9 return on bonds, rather than total returns, in deriving the risk premium. As a result, I
10 propose a historical risk premium CAPM result of 10.75 percent, a slight reduction from
11 the 11.2 percent conclusion in the Staff Testimony.

12
13 In addition, by combining my adopted 9.3 percent DCF result and 10.75 percent modified
14 CAPM, I arrived at a 10.0 percent cost of equity recommendation. I note that this 10.0
15 percent cost of equity recommendation does not include an adjustment for the very high
16 equity ratio (i.e., lower risk) of Chaparral.

17
18 **V. TOTAL COST OF CAPITAL**
19

20 **Q. Please describe the total cost of capital derived in the Staff Testimony.**

21 A. The Staff Testimony develops an 8.8 percent total cost of capital, as is summarized
22 below:

| <u>Capital Item</u> | <u>Percent</u> | <u>Cost</u> | <u>Wgt. Cost</u> |
|---------------------|----------------|-------------|------------------|
| Debt | 24.4% | 5.0% | 1.2% |
| Common Equity | <u>75.6%</u> | 10.0% | <u>7.6%</u> |
| WACC | 100.0% | | 8.8% |

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27
28 The capital structure and cost of debt reflected in the Staff Testimony, as well as in the
29 Chaparral filing, are hypothetical in nature since the Company receives all of its equity
30 financing from its parent American States Water. The Staff Testimony and Chaparral

1 filing differ slightly on the capital structure ratios, as a result of the Staff using more
2 current (i.e., June 30, 2008) information. I accept the capital structure ratios in the Staff
3 Testimony, although I agree with the position taken in the Staff Testimony that the equity
4 ratio of Chaparral (i.e., over 75 percent) is much higher than the actual capital structures
5 for publicly-traded water utilities (i.e., about 50 percent equity). I note that a case could
6 be made that the proper capital structure for Chaparral should be that of its consolidated
7 parent, which contains about a 50 percent equity ratio.

8
9 I also accept the 5.0 percent cost of debt contained in the Staff Testimony. This differs
10 slightly from the 5.1 percent contained in the Chaparral rebuttal filing.

11
12 **Q. Do you agree with the Staff Testimony's proposal to recognize the very high equity**
13 **ratio of Chaparral in the determination of the cost of equity for the Company?** *

14 **A.** Yes, I do. Chaparral's common equity ratio, as noted above, is about 75 percent common
15 equity, which is about 1 and a half times the 50 percent norm for publicly-traded water
16 utilities. This is a very significant difference in the capital structures for Chaparral versus
17 the proxy group that is used to develop its cost of equity. This significant difference in
18 common equity ratios is reflective in a risk differential between Chaparral and the proxy
19 group - a risk differential that should be recognized in the cost of equity for the
20 Company. I also note that Chaparral's parent company, American States Water, has a
21 common equity ratio that is similar to the proxy group (i.e., about 50 percent equity) and
22 is much less equity than is the case for Chaparral.

23
24 **Q. Do you endorse and adopt the 8.8 percent total cost of capital as proposed in the**
25 **Staff Testimony?**

26 **A.** Yes, I do.
27
28
29
30



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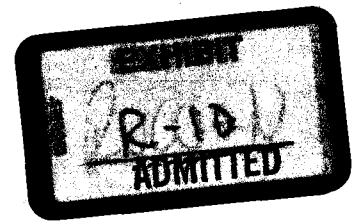
BEFORE THE ARIZONA CORPORATION COMMISSION

COMMISSIONERS

Arizona Corporation Commission

DOCKETED

DEC -8 2009



KRISTIN K. MAYES, Chairman
GARY PIERCE
PAUL NEWMAN
SANDRA D. KENNEDY
BOB STUMP

DOCKETED BY

nr

IN THE MATTER OF THE APPLICATION OF
ARIZONA-AMERICAN WATER COMPANY, AN
ARIZONA CORPORATION, FOR A
DETERMINATION OF THE CURRENT FAIR
VALUE OF ITS UTILITY PLANT AND
PROPERTY AND FOR INCREASES IN ITS
RATES AND CHARGES BASED THEREON FOR
UTILITY SERVICE BY ITS AGUA FRIA WATER
DISTRICT, HAVASU WATER DISTRICT,
MOHAVE WATER DISTRICT, PARADISE
VALLEY WATER DISTRICT, SUN CITY WEST
WATER DISTRICT AND TUBAC WATER
DISTRICT.

DOCKET NO. W-01303A-08-0227

IN THE MATTER OF THE APPLICATION OF
ARIZONA-AMERICAN WATER COMPANY, AN
ARIZONA CORPORATION, FOR A
DETERMINATION OF THE CURRENT FAIR
VALUE OF ITS UTILITY PLANT AND
PROPERTY AND FOR INCREASES IN ITS
RATES AND CHARGES BASED THEREON FOR
UTILITY SERVICE BY ITS MOHAVE
WASTEWATER DISTRICT.

DOCKET NO. SW-01303A-08-0227

DECISION NO. 71410

OPINION AND ORDER

DATES OF HEARING:

March 13 (Pre-Hearing Conference), 17, (Public
Comments in Phoenix), 18 (Public Comments in
Tubac), 19, 20, 23, 25, 26, and 30, 2009

PLACE OF HEARING:

Phoenix, Arizona

ADMINISTRATIVE LAW JUDGE:

Teena Wolfe

IN ATTENDANCE:

Kristin K. Mayes, Chairman
Gary Pierce, Commissioner
Paul Newman, Commissioner
Sandra D. Kennedy, Commissioner
Bob Stump, Commissioner

APPEARANCES:

Mr. Craig A. Marks, CRAIG A. MARKS, PLC, on
behalf of Arizona- American Water Company;

Mr. Daniel Pozefsky, Chief Counsel, on behalf of the
Residential Utility Consumer Office;

civic and charitable contributions, membership dues, and other related miscellaneous expenses not typically recovered from customers, from each of the seven districts through the 4-factor allocation methodology as follows:¹⁶⁸

| District | Agua Fria Water | Havasupai Water | Mohave Water | Paradise Valley Water | Sun City West Water | Tubac Water | Mohave Wastewater |
|-----------------------------------|-----------------|-----------------|--------------|-----------------------|---------------------|-------------|-------------------|
| Miscellaneous Expense Adjustments | (\$5,450) | (\$188) | (\$1,407) | (\$3,802) | (\$1,299) | (\$360) | (\$167) |

The adjustments proposed by RUCO and agreed to by the Company and Staff as set forth above are reasonable and will be adopted.

G. Tank Maintenance Program (all Water districts)

The Company proposed a reserve for water tank maintenance expense which would provide an annual allowance for tank maintenance costs in operating expenses. Under the Company's proposal, the funds collected through rates would be recorded in a deferred liability account labeled Reserve for Tank Maintenance, and the Reserve for Tank Maintenance account would be charged as tank maintenance expenses are incurred, reducing the balance of funds reserved.¹⁶⁹ The Company states that in subsequent rate cases, actual tank maintenance expenditures and the reserve account could be reviewed and the annual allowance increased, decreased or remain unchanged on a going forward basis as circumstances warrant,¹⁷⁰ and that all revenue collected would be offset by actual expenditures made to maintain tanks, resulting in no over-collection or under-collection of tank maintenance expense.¹⁷¹

RUCO supports the Company's request, based on its review of estimates the Company has received, but not accepted, through a request for proposals process.¹⁷² RUCO states that any future imprudent or unreasonable expenditure incurred by the Company in connection with the program could be addressed in a future rate case proceeding to insure that ratepayers are not harmed by the Company being overcharged for work that is not needed.¹⁷³

¹⁶⁸ Direct Testimony of RUCO witness Rodney L. Moore (Exh. R-5) at 15; Rebuttal Testimony of Company witness Sheryl L. Hubbard (Exh. A-29) at 13-14; Tr. at 782, 786.

¹⁶⁹ Company Brief at 41.

¹⁷⁰ *Id.*

¹⁷¹ *Id.*, citing Rebuttal Testimony of Company witness Sheryl L. Hubbard (Exh. A-29) at 14.

¹⁷² Direct Testimony of RUCO witness William A. Rigsby (Exh. R-12) at 28-29.

¹⁷³ *Id.* at 29.

1 Staff opposes the Company's proposal and recommends that test year tank maintenance
 2 expenses be normalized instead.¹⁷⁴ Staff does not accept the Company's proposed maintenance costs
 3 because they are based on costs proposed by a Company affiliate in Missouri and by an unaffiliated
 4 Arizona utility, Arizona Water Company, and that the Company did not demonstrate that the costs
 5 are directly comparable to its own costs.¹⁷⁵ Staff argues that there is no standard for maintenance on
 6 storage tanks because of climate differences and water quality.¹⁷⁶

7 We are not opposed to the Company instituting a 14-year interior coating and exterior
 8 painting program for its water tanks. However, we do not believe that it is necessary or reasonable to
 9 adopt the Company's proposal for advance funding of a Reserve for Tank Maintenance at this time.
 10 Because the tank maintenance expense reserve account balance proposed by the Company is not
 11 based on known and measurable Company expenditures, we find the normalization of tank
 12 maintenance expenses proposed by Staff, which is based on a three year average of expenses for each
 13 district, to be the more reasonable alternative. Staff's normalization adjustment will therefore be
 14 adopted for each of the six water districts.

15 H. Meter Depreciation Expense (all Water districts)

16 The Company proposed a uniform 15-year depreciation rate (6.67 percent per year) for
 17 Account 334100 - Meters, based on its efforts to replace all small water meters after 15 years of
 18 usage in order to maintain metering accuracy.¹⁷⁷ Staff states that while it supports the Company's
 19 formal proposal to go forward with a 15 year meter change-out program, Staff believes it is
 20 premature to adjust the meter depreciation rates, because the Company has not implemented such a
 21 plan in the past.¹⁷⁸

22 We agree with the Company that meter replacement is important in order to maintain accurate
 23 meter readings for its customers. We find that Arizona-American presented credible evidence that it
 24 has been replacing meters on a 15 year cycle over the last three years,¹⁷⁹ and that the Company's

25
 26 ¹⁷⁴ Staff Brief at 16.

27 ¹⁷⁵ *Id.*

28 ¹⁷⁶ *Id.*

¹⁷⁷ Rebuttal Testimony of G. Troy Day (Exh. A-10) at 5; Rebuttal Testimony of Linda J. Gutowski (Exh. A-26) at 29.

¹⁷⁸ Staff Brief at 16-17.

¹⁷⁹ Rejoinder Testimony of Company witness Linda J. Gutowski (A-27) at Exhibit LJC-2RJ.



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BEFORE THE ARIZONA CORPORATION CO

COMMISSIONERS

Arizona Corporation Commission

DOCKETED

JAN 6 2011

DOCKETED BY

nr



KRISTIN K. MAYES - Chairman
GARY PIERCE
PAUL NEWMAN
SANDRA D. KENNEDY
BOB STUMP

IN THE MATTER OF THE APPLICATION OF
ARIZONA-AMERICAN WATER COMPANY, AN
ARIZONA CORPORATION, FOR A
DETERMINATION OF THE CURRENT FAIR
VALUE OF ITS UTILITY PLANT AND
PROPERTY AND FOR INCREASES IN ITS
RATES AND CHARGES BASED THEREON FOR
UTILITY SERVICE BY ITS ANTHEM WATER
DISTRICT AND ITS SUN CITY WATER
DISTRICT, AND POSSIBLE RATE
CONSOLIDATION FOR ALL OF ARIZONA-
AMERICAN WATER COMPANY'S DISTRICTS.

DOCKET NO. W-01303A-09-0343

IN THE MATTER OF THE APPLICATION OF
ARIZONA-AMERICAN WATER COMPANY, AN
ARIZONA CORPORATION, FOR A
DETERMINATION OF THE CURRENT FAIR
VALUE OF ITS UTILITY PLANT AND
PROPERTY AND FOR INCREASES IN ITS
RATES AND CHARGES BASED THEREON FOR
UTILITY SERVICE BY ITS ANTHEM/AGUA
FRIA WASTEWATER DISTRICT, ITS SUN CITY
WASTEWATER DISTRICT AND ITS SUN CITY
WEST WASTEWATER DISTRICT, AND
POSSIBLE RATE CONSOLIDATION FOR ALL
OF ARIZONA-AMERICAN WATER
COMPANY'S DISTRICTS.

DOCKET NO. SW-01303A-09-0343

DECISION NO. 72047OPINION AND ORDER

PUBLIC COMMENTS:

April 7, 2010, at Anthem, Arizona
May 17, 2010, at Sun City, Arizona

DATE OF PRE-HEARING
CONFERENCE:

April 16, 2010

DATES OF HEARING - PHASE I,
REVENUE REQUIREMENT:

April 19, 20, 21, 22, 23, and 29, 2010

DATES OF HEARING - PHASE II,
RATE DESIGN AND
RATE CONSOLIDATION ISSUES:

May 18, 19, 20, 21, 25, 28, June 2, and 3, 2010

PLACE OF HEARING:

Phoenix, Arizona

ADMINISTRATIVE LAW JUDGE:

Teena Wolfe

1 treating uncollectible accounts: (1) the direct charge-off method under which uncollectibles and any
 2 associated, subsequent recoveries are recorded directly, or "charged off" to bad debt expense; and
 3 (2) the allowance method by which a company systematically records expense to bad debt expense
 4 with an offset to an allowance for doubtful accounts, and by which, unlike the charge-off method,
 5 the charge offs and any subsequent recoveries are then made to the allowance for doubtful accounts
 6 account, rather than to the bad debt expense account.²⁷⁹ According to Staff, the Company used a
 7 kind of hybrid method in this case whereby its charge-offs, as well as its systematic provision for
 8 bad debts, were both reflected in the bad debt expense account.²⁸⁰

9
 10 The Company did not brief the issue. Staff's recommended bad debt expense amounts,
 11 which correct the Company's erroneous calculations, are reasonable and will be adopted.

12 8. Tank Maintenance Expense (Sun City Water)

13 The Company requested approval to establish a tank maintenance reserve account to address
 14 ongoing tank maintenance requirements in its Sun City Water district.²⁸¹ In 2009, the Company
 15 commissioned a consultant to examine the condition of the tanks in the Sun City Water district and
 16 provide a recommendation for maintenance.²⁸² Based on the recommendation, the Company plans
 17 to commence a tank maintenance program for all the tanks in this district over the next fourteen
 18 years, beginning with those most in need of maintenance.²⁸³

19 Staff recommends that instead of establishment of a tank maintenance reserve account, the
 20 Company be authorized to include the known and measurable costs associated with tank
 21 maintenance as a normalized expense, in the amount of \$362,000.²⁸⁴ Staff's witness testified that
 22 Staff supports the Company's planned program of regular tank maintenance because of the long
 23 term benefits that accrue to ratepayers by reducing long term capital costs.²⁸⁵ The Company is in
 24

25 ²⁷⁹ *Id.*

26 ²⁸⁰ *Id.*

27 ²⁸¹ Direct Testimony of Company witness Bradley Cole (Exh. A-23) at 16.

28 ²⁸² *Id.* at 15; Exh. A-35.

²⁸³ Direct Testimony of Company witness Bradley Cole (Exh. A-23) at 16.

²⁸⁴ Staff Br. at 6, citing to Phase I Tr. at 815, 962-963. ✓

²⁸⁵ Phase I Tr. at 815.

1 agreement with Staff's recommendation.²⁸⁶

2 RUCO opposes the establishment of a tank maintenance expense reserve fund, but did not
3 object to the normalization adjustment proposed by Staff.²⁸⁷

4 We agree with RUCO and Staff that establishment of a tank maintenance expense reserve
5 fund for the Sun City Water district is not appropriate at this time and will not authorize such an
6 account. However the Company has demonstrated that it will begin, in the Sun City Water district, a
7 program with demonstrated known and measurable ongoing expense amounts that are reasonable
8 and will provide long term system benefits. Staff's recommendation for normalized tank
9 maintenance expense is based on those demonstrated known and measurable ongoing expense
10 amounts. The normalized expense amount recommended by Staff is reasonable and will be adopted
11 for purposes of this proceeding.

12
13 9. Tank Maintenance Deferral Account (Anthem Water)

14 The Company also requests authority to establish a deferral account to allow it to defer tank
15 maintenance expenses for the Anthem Water district until the next rate case for the district, at which
16 time the Company may seek recovery of the deferred amounts.²⁸⁸ RUCO does not oppose the
17 establishment of such a deferral account, as the Company already has such an account in place for
18 the Sun City Water district.²⁸⁹ We agree with the Company that establishment of such an account is
19 appropriate, and find that it is reasonable and in the public interest to authorize the Company to
20 establish a deferral account to allow it to defer tank maintenance expenses for the Anthem Water
21 district until the next rate case for the district, at which time the Company may present evidence in
22 support of recovery of the deferred expense amounts for consideration.

23 D. Operating Income Summary

| | Anthem Water | Sun City Water | Anthem/ Agua Fria Wastewater | Sun City Wastewater | Sun City West Wastewater |
|--------------------------------|-----------------|-------------------|------------------------------------|------------------------|-----------------------------|
| Adjusted Test Year Revenues | \$7,492,744 | \$9,283,101 | \$8,637,123 | \$5,940,381 | \$5,661,710 |

24
25
26
27 ²⁸⁶ Co. Reply Br. at 16.

²⁸⁷ RUCO Br. at 21-22; RUCO Reply Br. at 9.

²⁸⁸ Rebuttal Testimony of Company witness Thomas Broderick (Exh. A-7) at 10.

28 ²⁸⁹ RUCO Reply Br. at 10.

| | | | | | |
|--|-------------|-------------|-------------|-------------|-------------|
| Adjusted Test Year Operating Expenses | \$6,946,809 | \$8,376,956 | \$8,426,722 | \$5,888,749 | \$5,257,191 |
| Adjusted Test Year Operating Income | \$545,935 | \$906,145 | \$210,401 | \$51,632 | \$404,519 |

V. COST OF CAPITAL

The final rate of return recommendations are as follows:

| | Cost of Debt | Cost of Equity | Capital Structure Equity/Debt | Weighted Average Cost of Capital |
|---------|-----------------|-------------------|----------------------------------|-------------------------------------|
| Company | 4.91% | 10.70% | 38.86% / 61.14% | 7.20% |
| RUCO | 5.02%* | 9.50% | 39.15% / 60.85%* | 6.77% |
| Council | | | | 6.37%** |
| Staff | 4.91% | 10.70% | 38.86% / 61.14% | 7.20% |

* long-term and short-term debt combined.

** The Council did not perform a cost of capital analysis. The Council originally based its rate of return recommendation of 6.77 percent on that recommended by RUCO.²⁹⁰ However, in its Reply Brief, the Council states a belief that a 6.37 percent rate of return is reasonable and appropriate.²⁹¹

A. Capital Structure

The Company's application proposed a capital structure of 45.15 percent equity and 58.85 percent debt, excluding short-term debt.²⁹² However, in order to limit the number of issues in this case, the Company agreed in its rebuttal testimony to accept Staff's cost of capital recommendations.²⁹³ RUCO recommends a capital structure of approximately 13.29 percent short-term debt, 47.56 percent long-term debt and 39.15 percent equity.²⁹⁴ Staff recommends a capital structure of 38.86 percent equity and 61.14 percent debt, which includes short-term debt.²⁹⁵

There is very little difference between the capital structures recommended by RUCO and Staff's witnesses.²⁹⁶ For purposes of this proceeding, we adopt a capital structure for the Company consisting of 38.86 percent equity and 61.14 percent debt, which includes short-term debt.

²⁹⁰ Council Br. at 14.

²⁹¹ *Id.* at 15-16.

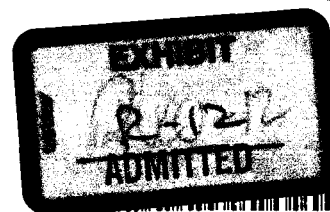
²⁹² Direct Testimony of Company witness Thomas Broderick (Exh. A-6) at 8-10.

²⁹³ Rebuttal Testimony of Company witness Thomas Broderick (Exh. A-7) at 4; Phase I Tr. at 490.

²⁹⁴ Surrebuttal Testimony of RUCO witness William Rigsby (Exh. R-4) at 3.

²⁹⁵ Direct Testimony of Staff witness Juan Manrique (Exh. S-3) at 10.

²⁹⁶ Surrebuttal Testimony of RUCO witness William Rigsby (Exh. R-4) at 3.



0000102438

BEFORE THE ARIZONA CORPORATION COMMISSION

COMMISSIONERS

Arizona Corporation Commission

DOCKETED

OCT 21 2009

KRISTIN K. MAYES - Chairman
GARY PIERCE
PAUL NEWMAN
SANDRA D. KENNEDY
BOB STUMP

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IN THE MATTER OF THE APPLICATION OF
CHAPARRAL CITY WATER COMPANY, INC.,
AN ARIZONA CORPORATION, FOR A
DETERMINATION OF THE FAIR VALUE OF
ITS UTILITY PLANT AND PROPERTY AND
FOR INCREASES IN ITS RATES AND CHARGES
FOR UTILITY SERVICE BASED THEREON.

DOCKET NO. W-02113A-07-0551

DECISION NO. 71308

OPINION AND ORDER

DATES OF HEARING: December 5, 2008 (Pre-Hearing); December 8, 9, and 10, 2008, and January 8 and 9, 2009.

PLACE OF HEARING: Phoenix, Arizona

ADMINISTRATIVE LAW JUDGE: Teena Wolfe

APPEARANCES: Mr. Norman D. James and Mr. Jay L. Shapiro, FENNEMORE CRAIG, on behalf of Chaparral City Water Company;

Ms. Michelle L. Wood, Attorney, on behalf of the Residential Utility Consumer Office;

Ms. Robin Mitchell, Ms. Amanda Ho, and Mr. Wesley Van Cleve, Staff Attorneys, Legal Division, on behalf of the Utilities Division of the Arizona Corporation Commission.

1 increased.¹²⁵ In regard to the December 2006 invoices, the record does not reflect any inquiry
 2 demonstrating that Staff's assumption that the chemicals were not properly a test year expense was
 3 correct. If so, it may have been proper to exclude them from test year expenses, but that is not what
 4 Staff proposed. Even if Staff had shown that the invoice amounts should have been excluded, the
 5 exclusion would not have justified a normalization adjustment. Because the record does not support
 6 the normalization of Chemical Expense proposed by Staff, the actual test year expense will be
 7 allowed instead.

8 Repairs and Maintenance Expense

9 Staff proposes a normalization adjustment to the Company's Repair and Maintenance
 10 Expense reducing the test year expense from \$104,609 to \$91,134. Staff believes that the fluctuation
 11 in this expense account, from \$96,152 in 2004, to \$72,640 in 2005, to \$104,609 in the test year,
 12 called for a normalization adjustment, based on Staff's opinion that there "does not appear to be any
 13 upward trending in these expenses."¹²⁶ In addition, Staff proposes exclusion of \$5,543 of test year
 14 expenses booked in this account for the Company's payments to Pepsi Cola Company of Dallas for
 15 beverages for the Company's employees. The Company does not dispute that the \$5,543 should be
 16 disallowed. We agree with Staff that this is an expense that should be borne by the shareholders, not
 17 the ratepayers, and will not be allowed. The \$5,543 disallowance to test year expenses brings the test
 18 year level of repair and maintenance expense down to a level close to the 2004 level of expense,
 19 which, based on the evidence presented, is a reasonable level. Because the record does not support
 20 Staff's proposed normalization of Repairs and Maintenance Expense, the actual test year expense,
 21 less Staff's proposed disallowance of \$5,543, will be allowed.

22 **C. Deferral of CAP M&I Charges**

23 The Company and Staff agree that the Company should be allowed recovery of 50 percent of
 24 the CAP M&I charges related to the additional CAP allocation, or \$20,306, as an operating expense,
 25 based on Staff's position that only 50 percent of the additional CAP allocation is used and useful at
 26 this time, and that 50 percent of the charges should be deferred.¹²⁷ Staff filed in this docket proposed

27 ¹²⁵ Tr. at 384-85.

28 ¹²⁶ Testimony of Staff witness Marvin E. Millsap (Exh. S-2) at 34; Staff Reply Brief at 4.

¹²⁷ Company Brief at 11, 20-21; Staff Reply Brief at 4.

1 accounting order language which would allow the deferral of the remaining 50 percent of the M&I
 2 charges.¹²⁸ RUCO states that if it is determined that some portion of the additional CAP allocation is
 3 used and useful, a commensurate portion of the associated annual water service capital charge should
 4 be included as an M&I expense in this case.¹²⁹ RUCO does not oppose the accounting order
 5 language as to form.¹³⁰ The Company disagrees with language in Staff's accounting order proposal
 6 allowing the Company a 36 month deferral period,¹³¹ and included its own proposed accounting order
 7 language as an attachment to its closing brief.¹³²

8 The Company and Staff disagree on two issues related to the deferral: (1) whether the
 9 Company should be allowed to defer interest or other carrying charges, and (2) whether the deferral
 10 should have a time limitation.

11 The Company asserts that until the recovery of interest or carrying costs can be considered in
 12 a future rate case, the Company should be allowed to accrue reasonable carrying costs.¹³³ Staff
 13 contends that it is inappropriate to allow the Company to accrue interest on the deferral, because 50
 14 percent of the M&I charges are not currently used and useful.¹³⁴ As Staff notes, the interest and
 15 timeframe requirements of Staff's proposal are consistent with other Commission Accounting
 16 Orders.¹³⁵ Staff's language "excluding any interest or other carrying charges" is consistent with our
 17 other Accounting Orders and will therefore be adopted.

18 The Company contends that there is no reason for "preset, artificial limits" on the deferral
 19 period.¹³⁶ Staff argues that without a specified timeframe, the Company would be able to defer the
 20 charges indefinitely.¹³⁷ Staff contends that 36 months is a reasonable timeframe for the deferral
 21 period, and points out that its proposal also includes a provision allowing the Company to continue
 22 the deferral beyond its evaluation in the Company's next rate case, such that the Staff proposal does
 23

24 ¹²⁸ Staff Proposed Accounting Order Language docketed on January 6, 2009.

25 ¹²⁹ RUCO Reply Brief at 7.

26 ¹³⁰ RUCO Response to Proposed Accounting Order, docketed on January 13, 2009.

27 ¹³¹ Company Brief at 21-22 and Exhibit 2.

28 ¹³² Company Brief at Exhibit 2.

¹³³ Company Brief at 21-22 and Exhibit 2.

¹³⁴ Staff Reply Brief at 5.

¹³⁵ *Id.*

¹³⁶ Company Brief at 21-22 and Exhibit 2.

¹³⁷ Staff Reply Brief at 5.

1 not specifically limit the deferral to 36 months.¹³⁸ Staff states that it proposed the 36 month
 2 timeframe in order to permit time for Staff to evaluate whether the Company is properly accounting
 3 for the deferral, and also to determine if all or a portion of the deferred charges are used and useful,
 4 and therefore eligible to be placed in rates.¹³⁹ For the reasons provided by Staff, we agree that a
 5 definite timeframe should be placed on the deferral period, and find that under the circumstances of
 6 this case, a 48 month period is reasonable.

7 **D. Rate Case Expense**

8 The Company requests authority to recover rate case expense associated with this case in the
 9 amount of \$280,000. The Company states that it based its request primarily on the \$285,000 amount
 10 awarded in its last rate proceeding, and that it has incurred more than \$280,000 in this proceeding.¹⁴⁰
 11 RUCO did not brief the issue of rate case expense for this case. Staff proposes that the Company be
 12 allowed to recover no more than \$150,000 in rate case expense for this proceeding, arguing that
 13 \$150,000 in rate case expense is similar to amounts the Commission has allowed comparably-sized
 14 utilities to recover through just and reasonable rates.¹⁴¹ Staff recommends that rate case expense be
 15 normalized, instead of amortized.¹⁴² The Company argues that Staff's opposition to the Company's
 16 request for this proceeding is not supported by the evidence, because Staff gave no consideration to
 17 the specifics of this rate case, to the rate case process, or to the similar rate case expense awards
 18 relied on by the Company, and because Staff could not provide specifics regarding the cases its
 19 witness relied on in reaching his recommendation.¹⁴³ The Company requests that if its rate case
 20 expense recovery is normalized, as Staff recommends, rather than amortized, that it be granted
 21 authority to institute a surcharge instead "to ensure that recovery actually occurs."¹⁴⁴ Based on our
 22 review of the record, we find that it is reasonable to allow recovery of \$280,000 for the expenses
 23 incurred by the Company in this proceeding. We agree with Staff that because rate case expense is a
 24

25 ¹³⁸ *Id.*

¹³⁹ *Id.*

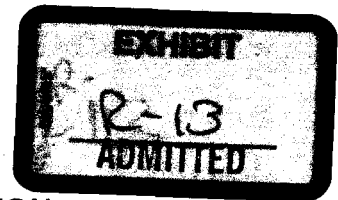
26 ¹⁴⁰ Company Brief at 22, citing Rebuttal Testimony of Company witness Thomas J. Bourassa (Exh. A-5) at 15 and
 Rebuttal Testimony of Company witness Robert N. Hanford (Exh. A-2) at 10.

27 ¹⁴¹ Staff Brief at 8.

¹⁴² *Id.*

28 ¹⁴³ Company Brief at 24, citing Tr. at 390-98.

¹⁴⁴ Company Reply Brief at 6.



BEFORE THE ARIZONA CORPORATION COMMISSION

BOB STUMP
Chairman
GARY PIERCE
Commissioner
BRENDA BURNS
Commissioner
BOB BURNS
Commissioner
SUSAN BITTER SMITH
Commissioner

IN THE MATTER OF THE APPLICATION OF)
CHAPARRAL CITY WATER COMPANY FOR)
A DETERMINATION OF THE FAIR VALUE OF)
ITS UTILITY PLANT AND PROPERTY AND)
FOR INCREASES IN ITS RATES AND)
CHARGES BASED THEREON.)
_____)

DOCKET NO. W-02113A-13-0118

DIRECT

TESTIMONY OF

JEFFREY M. MICHLIK

PUBLIC UTILITIES ANALYST V

RESIDENTIAL UTILITY CONSUMER OFFICE

DECEMBER 9, 2013

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EXECUTIVE SUMMARY

Chaparral City Water Company ("CCWC" or the "Company") is an Arizona "C" Corporation. On February 1, 2012, EPCOR Water (USA) Inc. ("EWUS") acquired CCWC from American States Water Company. The Company currently serves residents in the Fountain Hills area; its principal place of business is 12021 N. Panorama Drive, Fountain Hills, Arizona. The Company is engaged in the business of providing water utility services in its certificated area in Maricopa County, Arizona. The Company served approximately 13,730 customers during the test year ended December 31, 2012.¹ The Company's current rates were approved in Decision No. 71308, dated December 21, 2009.

Rate Application:

The Company-proposed rates, as filed, produce total operating revenue of \$12,156,013, an increase of \$3,141,028 or 34.84 percent, over adjusted test year revenue of \$9,014,985. The Company-proposed revenue will provide operating income of \$2,783,253 and a 10.21 percent rate of return on its proposed \$27,269,321 fair value rate base ("FVRB") which is its original cost rate base ("OCRB").

The Residential Utility Consumer Office ("RUCO") recommends rates that produce total operating revenue of \$10,717,753 an increase of \$1,636,808 or 18.02 percent, from the RUCO-adjusted test year revenue of \$9,080,945. RUCO's recommended revenue will provide operating income of \$2,154,337 and an 8.70 percent return on the \$24,762,495 RUCO-adjusted FVRB and OCRB.

Declining Usage:

If the Commission is inclined to approve a declining usage adjustment, RUCO recommends the Company file an annual report by January 31st of each year in this docket showing the increase/decrease in water usage for each customer class using a calendar year starting with the 2013 information.

Other items:

System Improvement Benefit ("SIB") Mechanism:

RUCO continues to recommend denial of the SIB in its current form.

Sustainable Water Surcharge ("SWS") Mechanism:

RUCO recommends denial of the proposed SWS. In lieu of a SWS, RUCO recommends projecting the CAP M&I charges and capital costs (not related to the additional CAP allocation of 50 percent), and any under or over-collection will be deferred and trued-up in the next rate case.

If the Commission is inclined to recommend a CAP surcharge mechanism in this case, RUCO would recommend the following:

¹ Based on the Company's 2012 annual report.

1. That the Company's pro-forma adjustment SM-10 be removed, as the expense will flow through the adjustor mechanism.
2. That the CAP surcharge mechanism be similar to the one approved in the Vail Water Company settlement agreement, in which the Company had to put forth a plan of administration, and provide an example of how the CAP surcharge is calculated.
3. That the Commission include a component in the calculation for customer growth, to help off-set the CAP surcharge to ratepayers.
4. A further reduction to the Company's ROE is given consideration.
5. The establishment of a rate case expense recovery surcharge.

Low Income Program:

RUCO recommends the establishment of a low income program.

RUCO also recommends that the Company file a plan of administration that addresses how the low income program will operate in this docket, and provide an example(s) how the Company intends to fund the low income program (e.g. through a high block usage surcharge).

Plant Additions and Deletions:

RUCO recommends that EPCOR include in all future rate case applications (for all districts) plant schedules that include plant additions, retirements, and accumulated depreciation balances by year and by plant account number that reconcile to the prior Commission decision.

I. INTRODUCTION

Q. Please state your name, occupation, and business address.

A. My name is Jeffrey M. Michlik. I am a Public Utilities Analyst V employed by the Arizona Residential Utility Consumer Office ("RUCO"). My business address is 1110 West Washington Street, Suite 220, Phoenix, Arizona 85007.

Q. Briefly describe your responsibilities as a Public Utilities Analyst V.

A. In my capacity as a Public Utilities Analyst V, I analyze and examine accounting, financial, statistical and other information and prepare reports based on my analyses that present RUCO's recommendations to the Arizona Corporation Commission ("Commission") on utility revenue requirements, rate design and other matters. I also provide expert testimony on these same issues.

Q. Please describe your educational background and professional experience.

A. In 2000, I graduated from Idaho State University, receiving a Bachelor of Business Administration Degree in Accounting and Finance, and I am a Certified Public Accountant with the Arizona State Board of Accountancy. I have attended the National Association of Regulatory Utility Commissioners' ("NARUC") Utility Rate School, which presents general regulatory and business issues. I have also attended various other NARUC sponsored events.

I joined RUCO as a Public Utilities Analyst V in September of 2013. Prior to my employment with RUCO, I worked for the Arizona Corporation Commission in the Utilities Division as a Public Utilities Analyst for a little over seven years. Prior to employment with the Commission, I worked one year in public accounting as a

1 Senior Auditor, and four years for the Arizona Office of the Auditor General as a
2 Staff Auditor.

3
4 **Q. What is the scope of your testimony in this case?**

5 A. I am presenting RUCO's analysis and recommendations regarding Chaparral City
6 Water Company's ("Company") application for a permanent rate increase. I am
7 also presenting testimony and schedules addressing rate base, operating
8 revenues and expenses, revenue requirement, and rate design.

9
10 **Q. What is the basis of your testimony in this case?**

11 A. I performed a regulatory audit of the Company's application and records. The
12 regulatory audit consisted of examining and testing financial information,
13 accounting records, and other supporting documentation and verifying that the
14 accounting principles applied were in accordance with the Commission-adopted
15 NARUC Uniform System of Accounts ("USOA").

16
17 **Q. How is your testimony organized?**

18 A. My testimony is presented in six sections. Section I is this introduction. Section II
19 provides a background of the Company. Section III is a summary of the
20 Company's filing and RUCO's rate base and operating income adjustments.
21 Section IV presents RUCO's rate base recommendations. Section V presents
22 RUCO's operating income recommendations. Section VI presents RUCO's
23 recommendations on other issues identified during our review.

24

25

1 **II. BACKGROUND**

2 **Q. Please review the background of this application.**

3 A. Chaparral City Water Company ("CCWC" or the "Company") is an Arizona "C"
4 Corporation. On February 1, 2012, EPCOR Water (USA) Inc. ("EWUS") acquired
5 CCWC from Arizona States Water Company. The Company currently serves
6 residents in the Fountain Hills area; its principal place of business is 12021 N.
7 Panorama Drive, Fountain Hills, Arizona. The Company is engaged in the
8 business of providing water utility services in its certificated area in Maricopa
9 County, Arizona. The Company served approximately 13,730 customers during
10 the test year ended December 31, 2012.² The Company's current rates were
11 approved in Decision No. 71308, dated December 21, 2009.

12
13 In addition, to owning CCWC, EWUS also owns the following water and
14 wastewater districts in Arizona:

15
16 Agua Fria District
17 Anthem District
18 Havasu District
19 Mohave District
20 Paradise Valley District
21 Sun City District
22 Sun City West District
23 Tubac District

24
25
26

² Based on the Company's 2012 annual report.

1 **III. SUMMARY OF FILING, RECOMMENDATIONS, AND ADJUSTMENTS.**

2 **Q. Please summarize the Company's proposals in this filing.**

3 A. The Company-proposed rates, as filed, produce total operating revenue of
4 \$12,156,013, an increase of \$3,141,028 or 34.84 percent, over adjusted test year
5 revenue of \$9,014,985. The Company-proposed revenue will provide operating
6 income of \$2,783,253 and a 10.21 percent rate of return on its proposed
7 \$27,269,321 fair value rate base ("FVRB") which is its original cost rate base
8 ("OCRB").

9
10 **Q. Please summarize RUCO's recommendations.**

11 A. The Residential Utility Consumer Office ("RUCO") recommends rates that
12 produce total operating revenue of \$10,717,753 an increase of \$1,636,808 or
13 18.02 percent, from the RUCO-adjusted test year revenue of \$9,080,945. RUCO's
14 recommended revenue will provide operating income of \$2,154,337 and an 8.70
15 percent return on the \$24,762,495 RUCO-adjusted FVRB and OCRB.

16
17 **Q. What test year did the Company use in this filing?**

18 A. The Company's rate filing is based on the twelve months ended December 31,
19 2012 ("test year").

20
21 **Q. Please summarize the rate base adjustments addressed in your testimony.**

22 A. My testimony addresses the following issues:

23 Post-Test Year Plant – This adjustment removes post-test year plant that has not
24 been completed and is also not used and useful in the amount of \$1,693,408. This
25 adjustment also increases accumulated depreciation expense by \$38,609 for
26 Post-Test Year Plant using the half-year convention for depreciation expense.

1 Customer Deposits – This adjustment increases the customer deposits based on
2 RUCO's use of a 13 month average, the result of which is an increase to
3 customer deposits in the amount of \$3,791.

4 Removal of Deferred Central Arizona Project ("CAP") Maintenance and Industrial
5 ("M&I") charges – This adjustment removes deferred debits in the amount of
6 \$78,206 which are not used and useful.

7 Removal of 24 Month Deferral of Allowance for Funds Used During Construction
8 ("AFUDC") and Depreciation Expense – This adjustment removes \$607,898 of
9 deferred AFUDC and Depreciation Expense.

10 Cash Working Capital - This adjustment applies to the cash working capital
11 component of the Company's working capital allowance, and decreases cash
12 working capital by \$84,917.

13
14 **Q. Please summarize the operating revenue and expense adjustments**
15 **addressed in your testimony.**

16 A. My testimony addresses the following issues:

17 Reversal of Declining Usage Adjustment – These adjustments reverse the effects
18 of the Company's declining usage adjustment, and increase metered water sales
19 by \$65,960, purchased water by \$13,196, fuel and power by \$7,501 and
20 chemicals by \$1,476.

21 Incentive Pay – This adjustment reduces salaries and wages expense by \$14,090
22 to recognize sharing of incentive costs at the local level for ratepayers and
23 shareholders.

24 Increase Purchased Water Expense – This adjustment increases purchased
25 water expense by \$87,678 related to CAP M&I, Capital Charges, and Maricopa
26 Water District ("MWD") charges in lieu of a Sustainable Water Surcharge ("SWS").

1 Corporate Allocation Expense – This adjustment reduces corporate allocation
2 expenses by \$139,155 to remove costs related to public relations and incentives
3 at the corporate level.

4 Conservation Expenses – This adjustment decreases miscellaneous expense by
5 \$7,079 to remove conservation expenses that were not incurred in the test year.

6 Tank Maintenance Expense – This adjustment decreases maintenance expense
7 by \$202,184 to remove projected costs that are not known and measureable.

8 Depreciation Expense – This adjustment decreases depreciation expense by
9 \$121,036, based on RUCO's recommended adjustments.

10 Property Tax Expense – This adjustment decreases property taxes by \$10,822 to
11 adjust property taxes to RUCO's adjusted test year amount.

12 Income Tax Expense – This adjustment increases income taxes by \$177,992 to
13 adjust income taxes to RUCO's adjusted test year amount.

14
15 **IV. RATE BASE**

16 **Fair Value Rate Base**

17 **Q. Did the Company prepare a schedule showing the elements of**
18 **Reconstruction Cost New Rate Base?**

19 **A. No, the Company did not. The Company's filing treats the OCRB the same as the**
20 **FVRB.**

21
22 ***Rate Base Summary***

23 **Q. Please summarize RUCO's adjustments to the Company's rate base.**

24 **A. RUCO's adjustments to the Company's rate base resulted in a net decrease of**
25 **\$2,506,826 from \$27,269,321 to \$24,762,495 . This decrease was primarily due**
26 **to RUCO's adjustments: (1) to post-test year plant and accumulated depreciation,**

1 (2) retirement of transportation vehicles, (3) adjustments to customer deposits, (4)
2 removal of deferred Central Arizona Project ("CAP") Maintenance and Industrial
3 ("M&I") Charges, (5) removal of 24 Month deferral of Allowance for Funds used
4 During Construction ("AFUDC") and depreciation expense, and (6) cash working
5 capital, as shown on schedules JMM-3, and JMM-4.

6
7 ***Rate Base Adjustment No. 1 – Post-Test Year Plant and Accumulated***
8 ***Depreciation***

9 **Post-Test Year Plant**

10 **Q. Has the Company completed all of its post-test year plant that it requested**
11 **in its application?**

12 A. No, not at the date of this filing. Based on RUCO data request 4.01, the Company
13 had completed and determined that \$2,191,355 of its requested \$3,884,763 is
14 now used and useful, while the remaining \$1,692,732 has yet to be completed
15 and \$676 is not used and useful (see Attachment A).

16
17 **Q. Has RUCO also trued-up the post-test year plant?**

18 A. Yes. For the Plant that was completed, placed into service, and is used and
19 useful, RUCO has updated the Company's estimated costs to reflect the actual
20 costs.

21
22 **Q. What is RUCO's policy in regards to the inclusion of post-test-year plant?**

23 A. RUCO's general policy is to consider post-test year plant that was placed into
24 service within six months after the end of the test year.

25

1 **Q. Has RUCO included post-test year plant that was completed within six**
2 **months after the end of the test year and is used and useful?**

3 A. Yes. In addition, at the date of this filing the Company has not updated its
4 response to indicate that any additional plant has been completed after the first
5 six months from the end of the test year.

6
7 Post-Test Year Accumulated Depreciation

8 **Q. Did the Company make an adjustment to Post-Test Year Accumulated**
9 **Depreciation under the half-year convention of depreciation?**

10 A. No.

11
12 **Q. Please explain the half-year convention of depreciation?**

13 A. The half-year convention treats all utility plant placed in service during the year as
14 placed in service in the midpoint of the year. Thus, depreciation expense is only
15 calculated for half a year, in the year that the asset is placed into service.

16
17 **Q. How does the half-year convention of depreciation expense affect the**
18 **balance sheet plant accounts, or in regulatory accounting, the rate base?**

19 A. A half-year of accumulated depreciation is also recorded as a contra asset to the
20 plant that was placed into service.

21
22 **Q. How does this apply to post-test year plant?**

23 A. The adjustment assumes the post-test year plant items were placed into service,
24 and thus a half year of accumulated depreciation is recorded.

25

1 **Q. Have other larger water utility companies also utilized this methodology**
2 **recently?**

3 A. Yes. In Docket Nos. W-01445A-10-0517, W-01445A-11-0310, and W-01445A-12-
4 0348, Arizona Water Company's witness Joel Reiker, Vice President of Rates and
5 Revenue stated the following when talking about accumulated depreciation
6 associated with post-test year plant:

7
8 *"This adjustment assumes that these items were placed into service on December*
9 *31, 2010, and assumes for ratemaking purposes that the Company recorded a*
10 *half-year of depreciation on these additions, consistent with standard utility plant*
11 *accounting practices."*³
12

13 **Q. Is this methodology also consistent with what regulated electric utility**
14 **companies in Arizona use for calculating accumulated depreciation**
15 **associated with post-test year plant?**

16 A. Yes. See docket E-04204A-12-0504.
17

18 **Q. What adjustment did RUCO make?**

19 A. RUCO applied the half-year convention of depreciation to all post-test year plant
20 that was completed within the first six months after the test year, using the
21 individual depreciation rates for each NARUC plant account.
22
23
24
25

³ See Docket No. W-01445-10-0517, page 12 of Mr. Reiker's application testimony.

1 **Q. What is RUCO's recommendation?**

2 A. RUCO recommends reducing Post-Test year plant by \$1,693,408 from
3 \$3,884,763 to \$2,191,355, and increasing accumulated depreciation expense by
4 \$38,609, as shown on schedules JMM-4 and JMM-5.

5

6 ***Rate Base Adjustment No. 2 – Retirement of Transportation Vehicles***

7 **Q. Did the Company's external auditors, during their review of the Company's**
8 **financial statements for the year ended December 31, 2012 note that two**
9 **vehicles were not retired from the Company's records?**

10 A. Yes. Based on the Company's audited financial statements the auditors noted that
11 two vehicles in the amount of \$77,348 had been sold, but were not retired on the
12 Company's books.

13

14 **Q. What is RUCO's recommendation?**

15 A. RUCO recommends removal of \$77,348 from Plant Account 341 Transportation
16 Equipment, along with the associated accumulated depreciation. As shown in
17 schedules JMM-4 and JMM-6.

18

19 ***Rate Base Adjustment No. 3 – Customer Deposits***

20 **Q. Did RUCO make an adjustment to customer deposits?**

21 A. Yes.

22

23 **Q. What adjustment did RUCO make?**

24 A. RUCO is increasing Customer Deposits by \$3,791.

25

26

1 **Q. Why did RUCO make this adjustment?**

2 A. RUCO utilized a 13 month average to calculate an average customer balance.
3 RUCO believes a 13 month average is more preferable to using a year-end
4 amount as the year-end balance may differ significantly from the average balance,
5 and thus provides a more realistic relationship between revenues, expenses and
6 rate base.

7
8 **Q. Has RUCO also made an adjustment to recognize the interest paid on the**
9 **customer deposits?**

10 A. No. Since the customer deposits consist solely of meter deposits, and no interest
11 expense is paid on the meter deposits.

12
13 **Q. What is RUCO's recommendation?**

14 A. RUCO recommends increasing Customer Deposits by \$3,791 from \$1,950 to
15 \$5,741 as shown on schedules JMM-4 and JMM-7.

16
17 ***Rate Base Adjustment No. 4 – Removal of Deferred Central Arizona Project***
18 ***("CAP") Maintenance and Industrial ("M&I") charges***

19 Additional CAP Allocation

20 **Q. In Decision No. 71308 (dated October 21, 2009), was the Company allowed**
21 **to include in rate base an additional cap allocation of 1,931 acre feet ("af")**
22 **of CAP water that the Company had acquired?**

23 A. Yes, the Company was allowed to rate base \$1,280,000 in account 303 Land and
24 Land Rights.

25
26

1 **Q. What was Staff's argument for allowing the full allotment in rate base?**

2 A. That the CAP reallocation occurs infrequently and CAP water is over-subscribed.⁴

3
4 **Q. Was the additional cap allocation fully used and useful at the time?**

5 A. No.

6
7 **Q. What were the consequences of including the additional CAP allocation in**
8 **rate base for ratepayers in the last decision?**

9 A. Ratepayers had to pay a return on a CAP allocation that was not at the time 100
10 percent used and useful, and are still paying for an additional CAP allocation that
11 is not even 50 percent used and useful. It has also created generational inequities
12 because current ratepayers are paying for future ratepayers through (growth) that
13 comes onto the system.

14
15 **Q. Can you provide an estimate of the impact on ratepayers?**

16 A. Yes. The amount included in rate base in Decision No. 71308 in account 303
17 Land and Land Rights was \$1,280,000, and the required rate of return on rate
18 base approved in that decision was 7.52 percent, or roughly \$96,256 or \$8,021
19 per month. Assuming rates went into effect on or after January 1, 2010 through
20 January 1, 2014, this would equate to 4 years or \$385,024.

21
22 Even if we are generous, as will be explained shortly and assume that the
23 Company used the maximum of 356 acre feet every year (which they did not), that
24 would equate to 18.43 percent (i.e. 356/1,931) per year. This results in rate

⁴ Docket No. W-02113A-07-0551, Decision No. 71308, page 10.

1 payers overpaying by \$314,064 for an item that was rate based and only used a
2 *maximum* of 18.43 percent in one year since the last rate case.

3
4 **Q. In the last case RUCO advocated that no more than 35 percent should be**
5 **rate based on the general rate making theory of used and useful?**

6 A. Yes.⁵

7
8 **Q. If ratepayers were charged for plant that was not fully used and useful and**
9 **is still not used and useful now, shouldn't they get a refund?**

10 A. In theory they should. However, in the prior Decision, the issue of the additional
11 CAP allocation was not decided on a used and useful argument but rather on a
12 prudency argument.

13
14 *"Our determination is based on the Company's need to provide its customers*
15 *continued access to adequate renewable water supplies and on the fact that*
16 *CCWC acted prudently under the circumstances in the December, 2007, \$1.28*
17 *million purchase of the additional CAP allocation."*⁶

18
19 Deferral of CAP Municipal and Industrial ("M&I") and Capital charges

20 **Q. Also, in Decision No. 71308, was the Company allowed to defer CAP**
21 **charges related to its additional CAP acquisition?**

22 A. Yes. In Decision No. 71308, the Company was authorized to include 50 percent of
23 the M&I and Capital costs related to the additional purchase of 1,931 acre feet
24 (AF) of CAP water in rates, and was authorized to defer the other 50 percent.

25

⁵ Ibid. page 15.

⁶ Ibid. page 17.

1 **Q. In the last rate case, how was the 50 percent split derived?**

2 A. Based on Staff's engineering report:

3
4 *"In its Engineering Report on the application, Staff found that approximately half*
5 *the requested additional 1,931 acre-feet per year CAP allocation (966 acre-feet)*
6 *would be used and useful within a five-year timeframe."*⁷
7

8 **Q. At the time did the previous owner of the Company agree with Staff?**

9 A. Yes.

10
11 *"The Company and Staff agree that the Company should be allowed recovery of*
12 *50 percent of the CAP M&I charges related to the additional CAP allocation, or*
13 *\$20,306, as an operating expense, based on Staff's position that only 50 percent*
14 *of the additional CAP allocation is used and useful at this time, and that 50*
15 *percent of the charges should be deferred."*⁸
16

17 **Q. To be clear was this issue based on a used and useful argument or a**
18 **prudency argument?**

19 A. A used and useful argument.

20
21 **Q. Does RUCO believe there is a difference?**

22 A. Yes. Prudency and used and useful are different regulatory concepts.
23
24

⁷ Ibid. page 10.

⁸ Ibid. page 23.

1 **Q. Has the Company asked to rate base the remainder of the deferral of these**
2 **charges in its application?**

3 A. Yes.
4

5 **Q. Was there a restriction placed on the time deferral period?**

6 A. Yes. On page 25, of the Decision 31308 it stated:
7

8 *"For the reasons provided by Staff, we agree that a definite timeframe should be*
9 *placed on the deferral period, and find that under the circumstances of this case:*
10 *a 48 month period is reasonable."*
11

12 **Q. Did the Company include 48 months or four years of deferred CAP M&I**
13 **costs?**

14 A. No, the Company included 60 months or an extra year in its calculation, and also
15 proposes to amortize these costs over 60 months.
16

17 **Q. What was the purpose of this deferral, as referenced on page 25 of the**
18 **Decision?**

19 A. *"To evaluate whether the Company is properly accounting for the deferral, and to*
20 *also determine if all or a portion of the deferred charges are used and useful, and*
21 *therefore, eligible to be placed in rates."*
22
23
24
25

1 **Q. Has RUCO made a determination as to whether the Company is properly**
2 **deferring these costs and whether all or a portion of the deferred charges**
3 **are used and useful, and should be placed into rates?**

4 A. Yes, RUCO has determined that the Company is properly deferring these costs.
5 However, the Company is currently still using much less than 50 percent of its
6 additional CAP allocation.

7
8 **Q. How much of the additional CAP allocation (1,931 af) is currently being**
9 **used?**

10 A. Amazingly the Company claims it is currently using all of its additional CAP
11 allocation.

12
13 **Q. What question did RUCO pose to the Company in RUCO data request 5.09?**

14 A. "Q: CAP Allocation – In regards to the additional CAP allocation purchased in
15 the last rate case of 1,931 acre feet, please answer the following questions:

16 a. How much of the additional CAP allocation is used and useful?

17 b. In five years how much of the additional CAP allocation will be used and
18 useful?

19 c. In what year does the Company estimate all of the additional CAP
20 allocation will be used and useful?"

21
22 **Q. What was the Company's response?**

23 A. "a) All of the additional CAP allocation is used and useful. Please refer to c)
24 below.

25 b) In five years all of the additional CAP allocation will continue to be used
26 and useful. Please refer to c) below.

1 c) In 2006 Chaparral City Water Company ("CCWC") used 7,334 acre feet
2 ("AF") of CAP water. This is approximately 356 AF above the original
3 allocation of 6,978 AF. CCWC, like all water utilities, experiences regular
4 variability in demand. This variability in demand over the last 10 years has
5 been as much as 22.5 percent between the highest year's use (7,334 AF in
6 2006) and the lowest year's use (5,684 AF in 2008). This is due to factors
7 such as weather, economics, changes in demand from both growth and
8 conservation. Because of this variability and unpredictability in demand, it
9 is important to have sufficient capacity to meet demand. When considering
10 the historic variability of demand and the fact that future demand will also
11 experience variability I would consider the additional CAP allocation to be
12 used and useful each and every year.

13
14 CCWC water supply is dependent on CAP water, CCWC cannot raise and
15 lower its CAP contract volume in response to swings in demand; water
16 rights for CAP water are not handled that way. Instead, CAP water rights
17 are allocated by the Arizona Department of Water Resources ("ADWR"),
18 subjected to a process of noticing regarding the recommended ADWR
19 allocations at the U.S. Department of the Interior, Bureau of Reclamation,
20 and are subsequently contracted for with the Central Arizona Water
21 Conservation District ("CAWCD"). CCWC's subcontract for CAP water is
22 with CAWCD. This process has only occurred twice in the history of CAP
23 water and is not expected to occur again for municipal priority water.

24
25 For additional information on the process please see my direct testimony."
26

1 **Q. Does this make sense?**

2 A. No. Regardless of the confusing response, the Company has used a *maximum* in
3 2007 of 356 acre feet above its original CAP allocation or a maximum of 18.43
4 percent (i.e. 356/1,931) of its additional CAP allocation.

5
6 **Q. Is this far less than the Staff engineer report indicated in the last rate case?**

7 A. Yes, according to the Staff engineer over half of the additional CAP allocation
8 would be used in 5 years, not 18.43 percent.

9
10 **Q. Is RUCO recommending that an additional 31.57 percent (i.e. 50 – 18.43), be**
11 **removed from purchased water expense?**

12 A. No. RUCO realizes that there needs to be some buffer for growth and customer
13 demand, and is again being generous with its recommendation.

14
15 **Q. Is RUCO opposed to allowing the Company to defer these costs until they**
16 **can be included in rate base in a future rate case?**

17 A. No. However, no carrying costs or cost of money should be accrued, given the
18 current inequities currently placed on current ratepayers by having a CAP
19 acquisition rate based that is fully not used and useful.

20
21 **Q. What is RUCO's recommendation?**

22 A. Consistent with Decision No. 71308, RUCO recommends the removal of \$78,206
23 from the Company's deferred debits account, as shown on schedule JMM-8. In
24 addition, the corresponding entry to eliminate the amortization of the deferred
25 debits in the amount of \$15,641 is shown on schedules JMM-19.

26

Rate Base Adjustment No. 5 – Removal of 24 Month Deferral of Allowance for Funds Used During Construction (“AFUDC”) and Depreciation Expense

Q. Please explain the Company’s proposal?

A. The Company proposes to defer AFUDC and depreciation expense related to plant in service for a period of 24 months. Put another way, the Company wants to include, as a deferred regulatory asset, an additional return of AFUDC on its plant that is in service but has not yet been rate based in a rate case, along with the associated depreciation expense.

Thus, the Company has asked for inclusion of a deferred debit in the amount of \$607,898 as a pro-forma adjustment to its rate base.

Q. Did the Company also propose the same in its request for an accounting order?

A. Yes, in an accounting order filed October 2, 2012, the Company asked the Commission for approval of an accounting order to defer post-in-service AFUDC and associated depreciation and amortization expense up to 24 months starting on July 1, 2012.⁹

In addition, the Company also asked for the same ratemaking treatment for several of its other water and wastewater districts.

⁹ See Docket No. W-20113A-12-0427.

1 **Q. What is the source of this ratemaking treatment?**

2 A. The Company in its accounting order filing cites to a Commission compliance
3 report¹⁰ in which it states staff recommended the following:

4
5 *"Consideration of authorizing utilities to record and defer depreciation and a cost*
6 *of money using an AFUDC rate on qualified plant replacements for up to 24*
7 *months after the in-service date to mitigate the effects of regulatory lag."*¹¹

8
9 **Q. Was there a decision in that filing?**

10 A. No. Both Staff and RUCO argued that the filing was premature and should be
11 looked at in the context of a general rate case. The Company agreed and decided
12 to pursue the issue of deferring AFUDC and depreciation expense separately for
13 each district in the context of future rate cases. On July 2, 2013, the filing was
14 administratively closed.

15
16 **Q. Please explain AFUDC?**

17 A. Construction work in progress ("CWIP") is generally not included in rate base,
18 because it violates the used and useful principle. However, companies are
19 allowed to earn a return, and include the financing cost as part of their plant that
20 will be rate based in a future rate case through AFUDC.

21
22 As long as plant items are included in construction work in progress ("CWIP"), the
23 Company may apply an AFUDC rate to the CWIP account.
24

¹⁰ See Docket Nos. SW-20445A-09-0077, W-02451A-09-0078, W-01732A-09-0079, W-20446A-09-0080, W-02450A-09-0081 and W-01212A-09-0082.

¹¹ See Docket No. W-20113A-12-0427, page 2.

1 Typically utilities apply the debt and equity components of their rate of return on
2 rate base approved in their last rate case decision to the CWIP balance.

3
4 As soon as the plant goes into service, the AFUDC stops.

5
6 **Q. So basically, the Company wants to defer an additional amount of AFUDC**
7 **up to 24 months on plant that is in service, but not yet included in rate base.**

8 A. Yes, plus the depreciation expense up to 24 months that is generated once the
9 plant goes into service.

10
11 **Q. Please explain the Company's calculation of depreciation expense?**

12 A. Instead of specifically identifying plant account numbers and applying a specific
13 depreciation rate to those plant accounts (e.g. Account No. 304 Structures and
14 Improvements – 3.33 percent), the Company has chosen to use the composite
15 rate which is a less accurate methodology for determining depreciation expense.

16
17 **Q. Is the Company also seeking a System Improvement Benefit ("SIB")**
18 **Mechanism in this case?**

19 A. Yes.

20
21 **Q. Do you believe it is Staff's opinion that a SIB can be used in conjunction**
22 **with a 24 month deferral of AFUDC and depreciation expense?**

23 A. I do not know what Staff's current position is, and I will let Staff speak to this
24 issue.

25

1 I do however; know that Staff used this concept to develop its Sustainable Water
2 Loss Improvement Program ("SWIP").

3
4 **Q. Briefly describe the SWIP?**

5 A. Staff developed the SWIP, during the Arizona Water Company - Eastern Group
6 case, as an alternative to a Distribution System Improvement Charges ("DSIC").
7 Staff wanted an alternative that would not burden its already scarce resources or
8 produce the mini-rate case phenomenon as will be described later.

9
10 The SWIP contained the following conditions:¹²

- 11 1. Applicable only to the Miami and Bisbee sub-systems;
- 12 2. Applicable only to transmission and distribution main replacements;
- 13 3. Allows deferral of depreciation expense on qualified plant replacements for
14 up to 24 months¹³ after the in-service date;
- 15 4. Allows recording and deferring a cost of money using its Allowance for
16 Funds Used During Construction rate on qualified plant replacements for
17 up to 24 months¹⁴ after the in service date;
- 18 5. Depreciation and cost of money deferrals will be subject to full regulatory
19 review for compliance with traditional ratemaking conditions (e.g.,
20 prudence, used and useful and excess capacity) in the Company's rate
21 case subsequent to the in-service date of the associated plant;
- 22 6. Depreciation and cost of money deferrals will be subject to the following
23 specific SWIP conditions:

¹² See the Direct Testimony of Jeffrey M. Michlik, Docket No. W-01445A-11-0310, pages 35-36.

¹³ Terminates before 24 months if rates become effective that include the qualified plant in rate base in the 24 month period.

¹⁴ Terminates before 24 months if rates become effective that include the qualified plant in rate base in the 24 month period.

- 1 a) Maintenance of appropriate supporting records to correlate
2 depreciation and cost of money deferrals with the associated plant;
3 b) Demonstration during its relevant rate case(s) (see condition No. 7)
4 that the plant replacements contributed to a reduction in water loss;
5 and
6 c) Whole or partial disallowances for deficiencies in "a" or "b"

7 7. Amortization of the allowed (i.e., net of any disallowances) combined
8 depreciation and cost of money deferrals over 10 years. The purpose of
9 this provision is to provide a continuous, 10-year incentive for the Company
10 to reduce its water loss. Thus, the Company must continue to meet
11 conditions "6a" and "6b" in each rate case over the 10-year amortization
12 period to continue recovering the deferral amortizations.
13

14 **Q. Early on did Staff answer the question as to whether a SWIP which is a**
15 **AFUDC deferral could be used in conjunction with a DSIC?**

16 **A. Yes.**
17

18 *"Q. For clarification purposes is Staff offering both its recommended Sustainable*
19 *Water Loss Improvement Program ("SWIP") and a Staff recommended DSIC?*

20 *A. No. Staff recommends the SWIP as discussed in my direct testimony.*
21 *However, if the Commission is inclined to adopt a DSIC as opposed to the*
22 *SWIP, Staff recommends adopting at least the conditions discussed above."¹⁵*
23
24
25

¹⁵ See the Surrebuttal Testimony of Jeffrey M. Michlik, Docket No. W-01445A-11-0310, page 6.

1 **Q. What was the result of the SWIP?**

2 A. The SWIP was rejected by the Company, as it did not provide immediate cash
3 flows for the Company. Under mounting pressure from the Commission, Staff
4 developed a System Betterment Cost Recovery ("SBCR"), which was then
5 transformed through settlement talks with the various water companies in Arizona
6 into the current day SIB.

7
8 **Q. So in essence the Company is requesting approval for two DSICs?**

9 A. Yes and the Company claims the two are not mutually exclusive, ignoring the
10 evolutionary history of the SIB.

11
12 **Q. What is RUCO's recommendation?**

13 A. Putting aside the fact that RUCO disagrees with the adoption of a SIB, RUCO
14 recommends the removal of \$607,898 from the Company's deferred debits
15 account, as shown on schedule JMM-8. In addition, the corresponding entry to
16 eliminate the amortization of the deferred debits in the amount of \$23,586 is
17 shown on schedules JMM-4 and JMM-9.

18
19 ***Rate Base Adjustment No. 6 – Cash Working Capital***

20 **Q. Is Cash Working Capital, just one component of the Company's working**
21 **capital allowance?**

22 A. Yes, the other components of the Company's working capital allowance are a
23 required bank balance, materials supplies inventory, and prepayments.

24
25 **Q. What basis did the Company use for its proposed cash working capital?**

26 A. The Company's proposed cash working capital is based on a lead-lag study.

1 **Q. What is a lead-lag study?**

2 A. A Lead/Lag Study measures the average length of time between the provision of
3 the Company's utility services to the customers, and the subsequent payment for
4 those services by customers, known as a revenue lag (or lead); and the average
5 length of time between when a Company incurs an expense, and when the
6 Company makes the cash payment, known as an expense lead (or lag).

7
8 A comparison is then made between the revenue lag (or lead) and the expense
9 lead (or lag), the total of which if positive, results in an addition to rate base to
10 compensate the Company's investors for additional cash working capital
11 investments it has made. If the total is negative, this results in a deduction from
12 rate base to compensate other investors (i.e. ratepayers) for their cash working
13 capital investments.¹⁶

14
15 **Q. What has the Company proposed?**

16 A. The Company has proposed a negative lead-lag total of \$19,817, which results in
17 a decrease to rate base to compensate ratepayers for their cash working capital
18 investments.

19
20 **Q. Does RUCO agree with all of the components included in the Company's**
21 **lead-lag study?**

22 A. No. Specifically the Company included rate case expense, and bad debt expense
23 in their study, and omitted interest expense.

24

25

¹⁶ Paraphrased from excerpts from Public Utility Working Capital by Carl W. Dabelstein, CPA.

rate case expense and bad debt expense from the

did
1 Q. Why does RUCO remove ~~these non-cash items~~ in a lead-lag study?

2 A. ~~Because there is no actual payment of cash. Rate case expense is usually~~
3 ~~amortized over a period of years,~~ *normalized and is not an ongoing expense and RUCO*
4 ~~expense, in the current year.~~

5
6 Q. Have water utility companies in the past tried to leave out interest expense
7 in their lead-lag studies?

8 A. Yes. In Decision No. 64282 (dated December 20, 2000) Arizona Water
9 Company's proposal to exclude interest expense from its lead-lag study was
10 denied. The Commission stated:

11
12 *"The Company collects cash used to make interest payments prior to the interest*
13 *due date and, during the time Arizona Water has possession of these funds, they*
14 *are a source of cost-free cash that can be used by the Company until making*
15 *payments to creditors. Therefore, in accordance with the NARUC methodology,*
16 *Staff claims that its lead-lag study properly included interest expense."*¹⁷

17
18 The Commission agreed that interest expense, which is a cash item available to
19 the Company for payment to creditors prior to the interest due date should be
20 included in a lead-lag study.

21
22 The interest expense component although not contested was included in Arizona
23 Water Company's lead-lag study and approved in Decision Nos. 71845 (dated
24 August 25, 2010), and 73736 (dated February 20, 2013).

25
¹⁷ See page 7 of the decision.

1 Q. For reference purposes have you included a lead-lag study conducted by
2 UNS Electric, which contains the items of a lead-lag discussed above?

3 A. Yes, see Attachment B.
4

5 Q. What is RUCO's recommendation?

6 A. RUCO recommends removing ~~non-cash~~ items such as bad debt expense, and
7 rate case expense, and including interest expense. The results of these
8 adjustments, along with RUCO adjustments made to operating expenses are
9 shown in schedule JMM-10 and results in a decrease of \$84,917 from the
10 Company's proposed amount of negative \$19,817.
11

12 V. OPERATING INCOME

13 *Operating Income Summary*

14 Q. What are the results of RUCO's analysis of test year revenues, expenses,
15 and operating income?

16 A. RUCO's analysis resulted in adjusted test year operating revenues of
17 \$9,080,945, operating expenses of \$7,918,865 and operating income of
18 \$1,162,080, as shown on schedules JMM-11 and JMM-12. RUCO made nine
19 adjustments to operating expenses.
20

21 *Operating Income Adjustment No. 1 – Reversal of Declining Usage Adjustment*

22 Q. Has the Company proposed a pro-forma declining usage adjustment?

23 A. Yes. The Company made a \$65,960, reduction to its metered revenues generated
24 by 3/4 inch through 3 inch residential customers, and corresponding adjustments
25 to reduce purchased water expense by \$13,196, fuel and power expense by

1 \$7,501, and chemicals by \$1,476. The net effect is an operating income reduction
2 of \$43,786 (i.e. \$65,960-\$13,196-\$7,501-\$1,476).

3
4 **Q. What type of methodology did the Company use when it calculated a**
5 **declining usage of 1.0531 percent for its residential customers?**

6 A. The Company used a 12 month moving average in usage per residential
7 customer for three calendar years 2010, 2011, and 2012 to derive a 1.0531
8 percent declining average.

9
10 **Q. Does RUCO agree with the Company's methodology?**

11 A. No, because it allows for data manipulation, as will be demonstrated below.

12
13 **Q. From the Company's work papers can you provide the yearly average in**
14 **usage per customer?**

15 A. Provided below is the **yearly** average in usage per customer:¹⁸

16 2010 109,556

17 2011 107,056

18 2012 109,628

19
20 As can be clearly seen the yearly residential usage went down in 2011, but then
21 rose again in 2012, and in fact it is an increase over the 2010 yearly residential
22 usage.

23
24

¹⁸ Reproduced from the Company's data

1 **Q. What are the results if you use a 13 month moving average instead of a 12**
2 **month moving average?**

3 A. The declining average is reduced from 1.0531 percent to 0.6832 percent.
4

5 **Q. What happens if you use just 2 years 2011 and 2012 instead of three years?**

6 A. The 12 month moving average is positive .0899 percent, and a 13 month moving
7 average is positive .3483 percent.
8

9 **Q. So what is your point?**

10 A. Depending on the number of years the analyst includes in the analysis and
11 whether the analyst uses a 12 or 13 month moving average greatly influence the
12 usage results.
13

14 Further, RUCO does not agree with the Company's assumption that customers
15 will continue to reduce consumption because the results are not known and
16 measurable.
17

18 **Q. Did Staff in a data request ask the Company to provide more data on the**
19 **declining usage adjustment?**

20 A. Yes, in response to Staff data request 4.2 the company responded by saying:
21

22 *"The Company has not prepared these schedules for the period after the end of*
23 *the test year through July 31, 2013 and this would be a very time-intensive*
24 *process."*
25
26

1 **Q. What is RUCO's recommendation?**

2 A. RUCO recommends reversal of the test year declining usage adjustment in the
3 amount of \$65,960, and reversal of the corresponding expense in the amount of
4 \$22,173 (i.e. \$13,196 + \$7,501+\$1,476), as shown in schedules JMM-12 and
5 JMM-13.

6
7 If the Commission is inclined to approve a declining usage adjustment, RUCO
8 recommends the Company file an annual report by January 31st of each year in
9 this docket showing the increase/decrease in water usage for each customer
10 class using a calendar year starting with the 2013 information.

11
12 ***Operating Income Adjustment No. 2 – Incentive Pay***

13 **Q. Did RUCO make an adjustment to salary and wages?**

14 A. Yes.

15
16 **Q. What adjustment did RUCO make?**

17 A. RUCO decreased salaries and wages by \$14,090.

18
19 **Q. Please explain why a 50 percent allocation to shareholders is appropriate
20 for an achievement / incentive / bonus pay compensation programs.**

21 A. In general, incentive compensation programs can provide benefits to both
22 shareholders and ratepayers. The removal of 50 percent of the incentive
23 compensation expense essentially provides for an equal sharing of such cost, and
24 therefore provides an appropriate balance between the benefits attained by both
25 shareholders and ratepayers. Both shareholders and ratepayers stand to benefit
26 from the achievement of performance goals as they have been awarded to a

1 number of the Company employees. In addition, there is no guarantee that the
2 same award levels that have been included in the Company's proposed expenses
3 in this rate case will be repeated in future years.
4

5 **Q. Has the Commission authorized this 50 percent sharing in the past?**

6 A. Yes. In Commission Decision No. 71623 (dated April 14, 2010), 50 percent of the
7 incentive compensation expense was excluded from revenue requirements.
8

9 Further in Decision No. 68487 (dated February 23, 2006), page 18 stated the
10 following:
11

12 *"We believe that Staff's recommendation for an equal sharing of the costs*
13 *associated with MIP compensation provides an appropriate balance between*
14 *the benefits attained by both shareholders and ratepayers. Although*
15 *achievement of the performance goals in the MIP, and the benefits attendant*
16 *thereto, cannot be precisely quantified there is little doubt that both*
17 *shareholders and ratepayers derive some benefit from incentive goals.*
18 *Therefore, the costs of the program should be borne by both groups and we*
19 *find Staffs equal sharing recommendations to be a reasonable resolution."*
20

21 **Q. What is RUCO's recommendation?**

22 A. RUCO recommends sharing the \$28,180 the Company has recorded as incentive
23 pay, and reducing salaries and wages by \$14,090 from \$1,024,112 to \$1,010,022
24 as shown on schedules JMM-11 and JMM-14.
25

Operating Income Adjustment No. 3 – Purchased Water Expense

Q. What is the basis of the Company's pro-forma adjustment for its purchased water?

A. Interestingly, the Company has included a pro-forma adjustment for future CAP costs absorbed in its purchased water expense using 2014 CAP rates.

Q. Has the Company also asked for a Sustainable Water Surcharge ("SWS")?

A. Yes, it appears the Company wants the best of both worlds.

Q. Why does the Company need to pro-forma future CAP costs and also have a SWS?

A. It doesn't, if the Company were granted an adjuster mechanism it would automatically recover any CAP M&I and capital charges.

Q. Is RUCO aware that the CAP water charges are continually rising?

A. Yes.

Q. How then can the Company recover its CAP M&I costs between rate cases?

A. Through a deferral of CAP costs that are examined in the Company's next rate case.

Q. So in lieu of a SWS, is RUCO opposed to projecting future CAP M&I, Capital, and MWD charges into the Company's purchased water rates, as the Company has already done?

A. No. More discussion of the Company's proposed SWS is included in the other items section of RUCO's testimony.

1 **Q. What is RUCO's recommendation?**

2 A. RUCO recommends adjusting the Company purchased water expense upward by
3 \$87,678 for CAP M&I charges and Capital charges by utilizing a five year average
4 of charges from the CAP 2013 through 2018 rate schedule based (which was
5 updated on June 6, 2013) on the Company's original CAP allocation of 6,978 a.f.
6 *plus one-half of the additional CAP allocation of 1,931 a.f.*, or 7,943.5 a.f. as
7 shown in Schedule JMM-15.

8
9 ***Operating Income Adjustment No. 4 – Corporate Allocation expense***

10 **Q. Has RUCO received at the date of this filing all of its data requests from the**
11 **Company involving Corporation Allocations?**

12 A. No. The Company has yet to provide RUCO with its sub-ledgers for each
13 corporate allocation cost pool, along with all invoices over \$5,000. That being
14 said, RUCO may recommend additional adjustments in its surrebuttal testimony.

15
16 **Q. From its preliminary review of the information provided by the Company,**
17 **what cost pools does RUCO believe should be removed?**

18 A. The At-Risk Cost pool and Public and Government Affairs costs pool (which
19 includes Corporate Communications, Operational Communications, EPCOR
20 Community Essentials Council, Community Relations, and Corporate
21 Communications).

22
23 **Q. Please explain why?**

24 A. The At-Risk Cost pool involves incentive programs at the corporate level that are
25 allocated to EPCOR's utilities. The Government Affairs costs pool consists of
26 programs that are related to maintaining community relationships. For example,

1 the Company stated that EPCOR Community Essentials Council ("ECEC") meets
2 quarterly to decide on EPCOR's donations to charitable organizations. The public
3 expects that corporations will reinvest a portion of their earnings in the community,
4 and doing so helps to enhance customers' perception of the corporation, thereby
5 improving overall customer satisfaction. Both of which have nothing to do with the
6 day to day operations of a water company, and ratepayers should not have to
7 burden this cost.

8
9 **Q. What is RUCO's recommendation?**

10 A. RUCO recommends the removal of \$139,155, from the Company's corporate
11 allocation expense, from \$500,300 to \$361,175, as shown on schedules JMM-11
12 and JMM-16.

13
14 ***Operating Income Adjustment No. 5 – Removal of Water Conservation Program***

15 **Q. Did the Company propose a pro-forma adjustment to miscellaneous**
16 **expense in the amount of \$7,079 for its water conservation program?**

17 A. Yes. The Company stated it had started a water conservation program post-test
18 year, similar to what it has done in its other districts, and estimates the yearly
19 costs to be \$7,079.

20

1 **Q. What type of programs or activities are included in the Company's water**
2 **conservation program?**

3 A. The Company stated in its application that

4 *"The activities include making the residential home water audit kit and the*
5 *residential home retrofit kit available. It will include a youth education component.*
6 *Bill inserts and bill text messages will also be implemented, educating customers*
7 *about water conservation. Conservation Staff will also be available to teach about*
8 *water conservation and visit homes and HOAs to give presentations on water*
9 *conservation."*

10
11 **Q. Is this program the same or similar to Best Management Practices ("BMPs")**
12 **tariffs located on the Arizona Corporation Commissions Website?**

13 A. Yes. In attachment A, RUCO has included a copy of two of these tariffs, the
14 Residential Audit Program Tariff – BMP 3.1, and the Adult Education and Training
15 Programs Tariff – BMP 2.1 (see Attachment C).

16
17 **Q. But didn't the Company say it was opposed to filing BMPs tariffs with the**
18 **Commission?**

19 A. Yes. However, I don't fully understand why, if they are already required by the
20 Arizona Department of Water Resources to file BMPs, it should be relatively easy
21 to file a tariff with the Commission.

22
23 **Q. What is the Commissions current policy on BMPs?**

24 A. That is more of a conundrum. Early on the Commission was in support of BMPs
25 for all size water utilities, the smaller water utilities were required to implement a
26 few BMPs, while the larger size water utilities were required to implement several

1 BMPs, depending on size. However, as of lately the Commission's policy has
2 been to approve BMPs only if the Company wants them.
3

4 **Q. Has the Commission set a policy on the cost recovery of BMPs?**

5 A. Yes. The Commission has allowed companies to recover the costs to implement
6 BMPs, and has also allowed companies to defer BMPs costs between rate
7 cases.¹⁹
8

9 **Q. Has the Commission allowed water companies to defer water conservation
10 programs that are not connected with BMPs?**

11 A. Not to my knowledge.
12

13 **Q. What is RUCO's recommendation?**

14 A. RUCO recommends that water conservation program expense in the amount of
15 \$7,079 be removed, as shown in schedule JMM-17, because it was incurred after
16 the test-year. If the Company wants to link the water conservation program to
17 Commission approved BMPs and file BMPs with the Commission, then RUCO will
18 not object to a deferral of these costs, consistent with other Commission
19 decisions.
20

21 ***Operating Income Adjustment No. 6 – Tank Maintenance Expense***

22 **Q. Did the Company make a pro-forma adjustment to include tank maintenance
23 expense of \$202,184 in its application?**

24 A. Yes.
25

¹⁹ Please see the Arizona Water Company cases cited above.

1 **Q. What is the Company's proposal?**

2 A. The Company has proposed a tank maintenance plan to cover the costs
3 associated with the stripping, treating and coating of the tanks, over an 18 year
4 period. The estimated cost of the 18 year plan is approximately \$3,639,307 or
5 \$202,184 per year.

6
7 **Q. Does RUCO agree with this proposal?**

8 A. No. The major problem with this proposal along with the countless others which
9 will be described below is the ***known and measureable*** standard. It is not known
10 whether the tank maintenance will follow the schedule attached to Company
11 witness Mr. Stuck's testimony. Nor is it measureable in that all the numbers are
12 estimates, in that the costs have not already occurred or will occur before rates go
13 into effect.

14
15 The length of the 18 year plan is also highly problematic. The further you move
16 from a historical test year the greater the imbalances become between rate base,
17 revenues, and expenses.

18
19 In Decision No. 71845, (dated August 25, 2010) beginning at page 26, line 26, the
20 Commission stated:

21
22 *"Despite the Company's claims, we do not believe there is any valid reason for*
23 *treating tank maintenance expenses differently from other properly incurred costs.*
24 *Although we recognize that these costs tend to be cyclical in nature, that fact*
25 *alone does not justify requiring ratepayers to support the Company's accrual*

1 *account methodology that would allow recovery in this case based solely on*
2 *estimates adjusted by an inflation factor."*

3
4 The Commission made a similar finding in Decision No. 71410, (dated December
5 8, 2009), for Arizona American Water Company (now EPCOR Water of Arizona
6 Inc.). Beginning at page 37, line 7 the Commission stated:

7
8 *"We are not opposed to the Company instituting a 14-year interior coating and*
9 *exterior painting program for its water tanks. However, we do not believe that it is*
10 *necessary or reasonable to adopt the Company's proposal for advance funding of*
11 *a Reserve for Tank Maintenance at this time. Because the tank maintenance*
12 *expense reserve account balance proposed by the Company is not based on*
13 *known and measurable Company expenditures, we find the normalization*
14 *maintenance expenses proposed by Staff, which is based on a three year*
15 *average of expenses for each district to be the more reasonable alternative. Staffs*
16 *normalization adjustment will therefore be adopted for each of the six water*
17 *districts."*

18
19 **Q. What is RUCO's recommendation?**

20 **A. RUCO recommends removing the tank maintenance expense by \$202,184 as**
21 **shown on schedule JMM-18.**

22
23 ***Operating Income Adjustment No. 7 – Depreciation Expense***

24 **Q. Did RUCO make an adjustment to depreciation expense?**

25 **A. Yes.**
26

1 **Q. What adjustment did RUCO make?**

2 A. As a result of adjustments made to plant in service, RUCO also adjusted the
3 associated depreciation expense.
4

5 **Q. What is RUCO's recommendation?**

6 A. RUCO recommends decreasing depreciation expense by \$121,036 from
7 \$2,014,048 to \$1,893,012, as shown in Schedule JMM-19.
8

9 ***Operating Income Adjustment No. 8 – Property Tax Expense***

10 **Q. What method has the Commission typically adopted to determine property**
11 **tax expense for ratemaking purposes for Class C and above water utilities?**

12 A. The Commission's practice in recent years has been to use a modified Arizona
13 Department of Revenue ("ADOR") methodology for water and wastewater utilities.
14

15 **Q. Did RUCO calculate property taxes using the modified ADOR method?**

16 A. Yes. As shown on Schedule JMM-20, RUCO calculated property tax expense
17 using the modified ADOR method for both test year and RUCO-recommended
18 revenues. Since the modified ADOR method is revenue dependent, the property
19 tax is different for test year and recommended revenues. RUCO has included a
20 factor for property taxes in the gross revenue conversion factor that automatically
21 adjusts the revenue requirement for changes in revenue in the same way that
22 income taxes are adjusted for changes in operating income.
23
24
25
26

1 **Q. Has RUCO also made an adjustment to the property tax assessment ratio?**

2 A. Yes. Based on House Bill 2001, RUCO has adjusted the property tax assessment
3 ratio to 19.0 percent. The Company in its filing used a 20 percent assessment
4 ratio.

5
6 **Q. What does RUCO recommend for test year property tax expense?**

7 A. RUCO recommends decreasing test year property tax expense by \$10,822, from
8 \$251,038 to \$240,216, as shown in schedule JMM-20.

9
10 ***Operating Income Adjustment No. 9 – Income Tax Expense***

11 **Q. Did RUCO make an adjustment to income tax expense?**

12 A. Yes, based on RUCO's recommended revenue requirement.

13
14 **Q. How did RUCO calculate income tax expense for the Company?**

15 A. RUCO applied the statutory state and federal income tax rates to RUCO's taxable
16 income. Income tax expenses for the test year and recommended revenues are
17 shown on schedule JMM-21.

18
19 **Q. Did RUCO change the State income tax rate from 6.968 percent to 6.5
20 percent?**

21 A. Yes, RUCO reduced the state corporate income tax rate from 6.968 percent to 6.5
22 percent to comply with House Bill ("HB") 2001 that was signed into law by
23 Governor Jan Brewer on February 17, 2011. As a result of the HB, RUCO has
24 reduced the State corporate income tax rate in its gross revenue conversion
25 factor.
26

1 **Q. Please elaborate on the provision contained in HB 2001.**

2 A. H.B. 2001 maintains the current State corporate income tax rate of 6.968%
3 through December 31, 2013. Thereafter, H.B. 2001 reduces the rate as follows:

- 4 • 6.5 percent for taxable years beginning from and after December 31, 2013
5 through December 31, 2014
- 6 • 6.0 percent for taxable years beginning from and after December 31, 2014
7 through December 31, 2015
- 8 • 5.5 percent for taxable years beginning from and after December 31, 2015
9 through December 31, 2016
- 10 • 4.9 percent for taxable years beginning from and after December 31, 2016
11

12 **Q. What adjustment does RUCO recommend for test year income tax expense**
13 **for the Company?**

14 A. RUCO recommends increasing test year income tax expense by \$177,992 , from
15 \$389,412 to \$567,404, as shown on schedule JMM-21.
16

17 **VI. OTHER ISSUES**

18 ***System Improvement Benefits ("SIB") Mechanism***

19 **Q. Explain the general concept of a SIB as proposed by the Company?**

20 A. A SIB is a surcharge mechanism that enables the Company to implement a
21 surcharge to recover the revenue requirement (depreciation and rate of return) of
22 capital invested in certain items of plant between rate cases.
23

24 **Q. What are some concerns presented by a SIB?**

25 A. A primary concern is that a SIB alters the balance of regulatory lags. Some lags
26 are beneficial to the Company, for example, growth in customers and recovery of

1 depreciation expense between rate cases. Other lags, such as the depreciation
2 and return costs for infrastructure improvements funded by investors between rate
3 cases, are detrimental to the Company. Introducing a SIB reduces the lag time
4 for recovery of the depreciation and return on investment causing the balance
5 among the ratemaking tools to favor the Company to the detriment of ratepayers.
6 A SIB also allows recovery of capital improvement costs outside of a rate case
7 resulting in less scrutiny of its prudence and used and useful status.
8

9 **Q. What are some of the benefits of a SIB?**

10 A. Despite the detrimental aspects presented by a SIB, it also has benefits for the
11 Company and its ratepayers. The primary benefits for the Company are the
12 quicker recovery of depreciation and return costs for capital improvements and
13 improved cash flow. As a result, the Company is encouraged to replace
14 aging/deteriorating plant sooner and experience a reduction in costly water loss.
15 In turn, ratepayers should receive improved service and reliability. A SIB also
16 benefits ratepayers by producing more gradual changes in rates, and it may
17 reduce the need for or frequency of future rate proceedings.
18

19 **Q. Without going into great detail is it still RUCO's position that if utility**
20 **companies are authorized adjuster mechanisms (e.g. SIB or CAP adjuster**
21 **mechanism) between rate cases that reduces the regulatory lag, the**
22 **Company's risk is decreased, and hence the Company's return on equity**
23 **("ROE") should also be decreased?**

24 A. Yes.
25

1 **Q. Can you summarize what has happened thus far with the development of**
2 **the SIB?**

3 A. Yes. During a Commission open meeting held on February 12, 2013,
4 Commissioner Bitter Smith, offered an amendment that was subsequently
5 adopted by the Commission in Decision No. 73736, in which the following was
6 ordered:

7
8 *"IT IS FURTHER ORDERED that this Docket shall remain open to allow the*
9 *parties the opportunity to enter into discussions regarding AWC's DSIC proposal*
10 *and other DSIC like proposals.*

11
12 *IT IS FURTHER ORDERED that interested parties shall be allowed the*
13 *opportunity to request late intervention in this Docket for the specific and limited*
14 *purpose of discussing Arizona Water Company's DSIC proposal, other DSIC like*
15 *proposals, and the possibility of achieving a settlement/compromise on the two.*

16
17 *IT IS FURTHER ORDERED that requests to intervene shall be filed no later than*
18 *February 20, 2013, and that the Hearing Division shall rule on the requests to*
19 *intervene by February 28, 2013, and shall schedule a Procedural Conference no*
20 *later than March 8, 2013, to set up a schedule to govern further proceedings in*
21 *this matter.*

22
23 *IT IS FURTHER ORDERED that the parties may enter into settlement discussions*
24 *any time after February 28, 2013.*
25

1 *IT IS FURTHER ORDERED that Staff should provide the Commission an update*
2 *on the progress of negotiations no later than the Commission's Open Meeting of*
3 *April 9 and 10, 2013."*

4
5 What transpired next were several meeting between Staff, RUCO, and several
6 intervenors.²⁰ On April 1, 2013, Staff filed a Settlement Agreement signed by all
7 parties except RUCO and the City of Globe. A Recommend Order and Opinion
8 ("ROO") was issued on May 28, 2013. The ROO was modified by the Commission
9 in Decision No. 73938 dated June 27, 2013. Instead of the acronym DSIC a SIB
10 which stands for System Improvement Benefits, was adopted.

11
12 On July 17, 2013, the Residential Utility Consumer Office ("RUCO") requested a
13 rehearing of Decision No. 73938. RUCO requested rehearing on two issues: that
14 the Commission should have reduced AWC's cost of equity ("COE") when the SIB
15 mechanism was approved; and that the SIB mechanism does not qualify as an
16 adjustor mechanism and is therefore illegal under Arizona law.

17
18 On August 5, 2013 RUCO was granted a rehearing by the Commission.

19
20 **Q. What is the current status of the rehearing?**

21 **A. The hearing phase has concluded, and the parties to the SIB are in the process of**
22 **writing their legal briefs.²¹**

23

²⁰ The following were also intereვენors that participated in Phase 2 of the Arizona Water Company case, Rio Rico Utilities, Inc. dba Liberty Utilities; EPCOR Water Arizona, Inc.; Global Water Utilities; Arizona Investment Council; the Water Utility Association of Arizona; and the City of Globe.

²¹ See Docket No. W-01445A-11-0310.

1 **Q. Was there any new information that came out of the rehearing on November**
2 **26, 2013?**

3 A. Yes. Staff witness Steven M. Olea, Director of the Utilities Division admitted at the
4 hearing that although he was not having buyer's remorse, he was concerned
5 about the additional work load a SIB would put on his Staff, and suggested that if
6 water utility companies could not provide Staff with information that was in a ready
7 format that could be quickly reviewed, Staff would not recommend any SIBs going
8 forward.²²

9
10 **Q. Does RUCO agree with Mr. Olea's assessment?**

11 A. Yes.

12
13 **Q. If the Commission keeps approving adjuster mechanisms, does this put**
14 **additional strain on both Staff and RUCO resources?**

15 A. Yes. In essence these adjuster mechanisms become mini-rate cases.

16
17 **Q. Please elaborate.**

18 A. For example, when there is an Arsenic Cost Recovery Mechanism ("ACRM") filing
19 both Staff and RUCO review the Company's filing. The filing consist of several
20 schedules, which must be reviewed in order to ensure that the schedules are
21 correct, that the correct rates are being used, that the hundreds of invoices
22 submitted to support the arsenic plant are correct, in Staff's case that a memo and
23 recommended order be prepared, that the Company's objections are addressed,
24 *in essence a mini-rate case.*

25

²² Arizona Corporation Commission Website, Hearings Archive 2013, W-01445A-11-0310, Arizona Water Company November 26, 2013.

1 So the point is that instead of evaluating the information once in the context of
2 general rate case, you now have to evaluate these adjuster mechanisms several
3 times between rate cases, the same would hold true for a SIB or CAP adjuster
4 mechanism if approved by the Commission.

5
6 **Q. Even though RUCO is opposed to a SIB in its current form, is it RUCO's**
7 **belief that a SIB should be determined on a case by case basis?**

8 A. Yes. As will be explained in the plant additions and deletions section that follows,
9 if the Company cannot support its own plant records in this rate case, how can the
10 Company support a SIB.

11
12 **Q. What is RUCO's recommendation?**

13 A. RUCO continues to recommend denial of the SIB in its current form.
14

15 ***Sustainable Water Surcharge ("SWS")***

16 **Q. Please explain the Company's proposal to implement a SWS?**

17 A. The Company has also asked for a SWS to recover the cost of water purchased
18 from the Central Arizona Project ("CAP"), and charges related to water storage
19 with the Replenishment District and/or credits for water storage with MWD GSF.
20

21 **Q. Please give some background on CAP.**

22 A. Authorized as part of the Colorado River Basin Project Act (Pub. L. 90-537) in
23 1968, the CAP is a multi-purpose water project, which delivers water for irrigation,
24 municipal and for industrial uses in central and southern Arizona. CAP Municipal
25 and Industrial ("M&I") subcontractors of which the Company is one, have entered
26 into CAP subcontracts with the Central Arizona Water Conservation District

1 ("CAWCD") and the United States Secretary of the Interior, in which they obtain
2 water allocations in acre feet from the Colorado River. The M&I fees recoup
3 construction costs spent by CAP that is payable to the United States. The
4 Company's payment of M&I fees to CAP assures that the Company's CAP
5 allocation remains available to them. The Company's current CAP allocation is
6 8,909 (6,978 original plus additional CAP allocation of 1,931) acre feet. The
7 annual M&I is payable in equal semi-annual installments.

8
9 When the Company actually takes delivery of CAP water allotted to them it pays
10 an annual CAP Operation, Maintenance, and Replacement ("OM&R") expense in
11 monthly payments.

12
13 **Q. How has the Commission dealt with the issue of CAP costs previously**
14 **using Arizona Water Company as an example?**

15 **A.** The Commission in Decision No. 68302 (November 14, 2005)²³, distinguished
16 between CAP water that was being delivered as used and useful and CAP water
17 that was not being delivered. In that case, two golf courses took delivery of 279
18 acre feet of CAP water. The 279 acre feet of CAP water was deemed used and
19 useful, and therefore the previously deferred M&I charges were included in rate
20 base and amortized to expense over 20 years. Likewise the Commission in
21 Decision No. 71845 (August 24, 2010)²⁴, 1,003 acre feet of CAP was deemed
22 used and useful, and therefore the previously deferred M&I charges were included
23 in rate base and amortized to expense over 20 years.

24
²³ Docket No. W-01445A-04-0650.

²⁴ Docket No. W-01445A-08-0440.

1 The CAP water that was not delivered and deemed not used and useful was
2 deferred. Each year the M&I balance is brought forward reduced by amounts
3 included in rate base, reduced by sales of non-potable CAP water pursuant to its
4 NP-274 tariff. The customer is required to reimburse the Company for the related
5 ongoing (not to be confused with *deferred*) M&I capital charges. Thus, when the
6 Company sells non-potable CAP water pursuant to the NP-274 tariff, it expenses the
7 related ongoing M&I capital charges to account 6022 (making them a pass-thru
8 expense similar to sales taxes) instead of deferring them. The balance is then further
9 reduced by CAP Hook-up fees collected, and increased by AFUDC on the balance.
10 This process is projected every year until 2025, the Company then compares the
11 projected amount to be recovered compared to the actual amount to be recovered in
12 the rate case, and adjusts the Hook-up fee in the next rate case.²⁵

13
14 **Q. Does EWUS currently have other Districts that have CAP surcharges?**

15 **A. Yes.**

16
17 **Q. Does RUCO find it troubling that there are several methods utility**
18 **companies are using to recover CAP surcharges?**

19 **A. Yes.**
20
21
22
23
24

²⁵ The information was derived from Exhibits in the Company's rate case application.

1 Q. On page 19, of his application testimony, Company witness Mr. Jake
2 Lenderking states that the SWS is similar to other CAP surcharges which
3 the Commission has historically approved, but provides no citation(s). Mr.
4 Michlik are you aware of any cases in which a CAP surcharge was
5 approved?

6 A. Yes. As a result of a *settlement agreement* between Staff and Vail Water
7 Company, Vail Water Company was allowed to implement a CAP surcharge.²⁶
8

9 Q. What is a settlement agreement?

10 A. It is a negotiation between the parties in this case Staff and Vail Water Company,
11 in which there is give and take on the respective parties' positions.
12

13 Q. Was it Staff's original position to approve a CAP surcharge adjuster
14 mechanism?

15 A. No. The CAP M&I expenses were to be deferred, and a temporary CAP surcharge
16 implemented to recover CAP delivery charges and wheeling costs, until the
17 Company's next rate case.
18

19 Q. Since you were the analyst for Staff at the time, what was Staff's original
20 position in that case?

21 A. Staff normalized the CAP Municipal and Industrial ("M&I") and CAP Capital
22 charges by calculating the average over a five year period using information in
23 CAP'S Final 2013 to 2018 Rate Schedule.
24

²⁶ See Docket No. W-01651B-12-0339, Decision No. 73995 dated July 30, 2013.

1 Staff increased the test year costs to account for the increases in CAP charges
2 based on the average of the CAP rate schedule.
3

4 **Q. Is this similar to what RUCO is recommending in this case?**

5 A. Yes.
6

7 **Q. What is RUCO's recommendation?**

8 A. RUCO recommends denial of the proposed SWS. In lieu of a SWS, RUCO
9 recommends projecting the CAP M&I charges and capital costs (not related to the
10 additional CAP allocation of 50 percent), and any over or under collection will be
11 deferred and trued-up in the next rate case.
12

13 **Q. If the Commission were to approve a CAP surcharge in this case, what
14 would be RUCO's recommendation?**

15 A. If the Commission is inclined to recommend a CAP surcharge mechanism in this
16 case, RUCO would recommend the following:

- 17 1. That the Company's pro-forma adjustment SM-10 be removed, as all the
18 expense will flow through the adjustor mechanism.
- 19 2. That the CAP surcharge mechanism be similar to the one approved in the
20 Vail Water Company settlement agreement, in which the Company had to
21 put forth a plan of administration, and provide an example of how the CAP
22 surcharge is calculated.
- 23 3. That the Commission include a component in the calculation for customer
24 growth, to help off-set the CAP surcharge to ratepayers.
- 25 4. A further reduction to the Company's ROE is given consideration.
- 26 5. The establishment of a rate case expense recovery surcharge.

1 **Q. Isn't it RUCO's generally philosophy to oppose adjuster and surcharge**
2 **mechanisms?**

3 A. Yes, when they do not benefit ratepayers. However, for far too long ratepayers
4 have been subjected to one-sided adjuster mechanisms and surcharges
5 promoted by the water industry and adopted by the Commission. At the very least,
6 a few adjuster mechanisms or surcharges should be approved that benefit
7 ratepayers. The establishment of a rate case expense surcharge would safeguard
8 ratepayers from overpaying on the estimated rate case costs between rate cases.
9

10 **Q. Please explain what you mean by the establishment of a rate case expense**
11 **surcharge?**

12 A. RUCO recommends an adjuster mechanism that would be similar to the one
13 adopted in Decision No. 73573,²⁷ in which the Commission approved the
14 following:
15

16 *"We will therefore authorize Pima to implement a surcharge of \$0.33 per customer*
17 *for the water division, and a surcharge of \$0.33 per customer for the wastewater*
18 *division, with the surcharges remaining in place for either: (1) a period of 60*
19 *months, or (2) until Pima has collected \$200,000 per division in rate case expense*
20 *recovery, whichever comes first."*
21
22
23

²⁷ Pima Utility Company Docket No. W-02199A-11-0329 and SW-02199A-11-0330, page 17.

Low Income Program

Q. Has the Company asked for a low income program to assist residential customers in its service area?

A. Yes. The Company wants to establish a program that is similar to its low income programs that it has already established in its other districts.

Q. What is RUCO's recommendation?

A. Even though, the Company's primary service area is Fountain Hills, RUCO believes that there are customers who could benefit from the program. Therefore, RUCO recommends the establishment of a low income program.

RUCO also recommends that the Company file a plan of administration that addresses how the low income program will operate in this docket, and provide an example(s) how the Company intends to fund the low income program (e.g. through a high block usage surcharge).

Plant Additions and Deletions

Q. Is it customary for Utility Companies to provide in their rate case applications, schedules supporting their plant additions and retirements for each plant account, dating back to the last rate case?

A. Yes. In fact it is part of the required schedule for smaller utilities using Staff's short form rate application.

Q. Are you aware of any A size utility companies not filing these schedules as part of their rate case application?

A. No.

1 **Q. Did the Company provide a complete listing of all of its additions and**
2 **deletions since its last rate case?**

3 A. No. In response to Staff data request 3.28 in which Staff asked the following
4 question:

5
6 *"Refer to Schedules B-2 pages 3.2 through 3.5 and provide a list that breaks out*
7 *the components and amounts that comprise the plant additions and deletions by*
8 *year since the last Rate Case."*

9
10 The Company responded by stating on August 8, 2013:

11
12 *"We have plant additions and deletions from Jan 2011 through Dec 2012. See*
13 *attached schedule labeled "STF GB 3.28 Plant Additions and Deletions.xls".*

14
15 **Q. Did RUCO follow-up on Staff data request 3.28, on October 1, 2013?**

16 A. Yes. Please see the Company's response to RUCO data request 3.01, dated
17 October 11, 2013, and supplemented on October 24, and again on October 27,
18 2013 that is included in Appendix D.

19
20 **Q. Did the Company's response prompt another RUCO data request on**
21 **November 1, 2013?**

22 A. Yes. Please see the Company's responses to RUCO data requests 7.02 through
23 7.06 dated November 12, 2013 contained in Appendix D.
24
25

1 Q. Did the Company's response to RUCO data requests 7.02 through 7.06
2 prompt yet again another RUCO data request on November 22, 2013?

3 A. Yes. Please see RUCO data request 8.01, and the responses to RUCO data
4 request 8.01 contained in Appendix D.

5
6 Q. Has this delayed both RUCO and Staff's audit of the Company's plant?

7 A. Yes.

8
9 Q. What is RUCO's preliminary recommendation at this point in the process?

10 A. RUCO has not had sufficient time to review the Company's plant accounts, and
11 unfortunately will have to make its recommendations in its surrebuttal testimony,
12 and may ask for an extension or suspension of the time clock at a later date.

13
14 Q. Does RUCO have any further comments?

15 A. Yes. This is very troubling, that a class A utility does not have prior period records
16 to support its plant. The Company is required to do its due diligence when it
17 purchases an existing utility system, and this would include obtaining and
18 maintaining the plant records. *Frankly this is inexcusable.*

19
20 Q. Can this be avoided in future EPCOR filings?

21 Yes.

22
23 Q. What is RUCO's recommendation?

24 A. RUCO recommends that EPCOR include in all future rate case applications (for
25 all districts) plant schedules that include plant additions, retirements, and

1 accumulated depreciation balances by year and by plant account number that
2 reconcile to the prior Commission decision.
3

4 **Q. Is there anything else that can be done?**

5 A. Yes. RUCO is aware that EPCOR asked for a fair value rate determination when it
6 purchased Northern Mohave Valley Corporation,²⁸ RUCO agrees with the
7 Company on this point that a fair value determination on rate base can be made
8 during the sale of a certificate of convenience and necessity.
9

10 **Q. Does this conclude your direct testimony?**

11 A. Yes, it does.
12

²⁸ Docket Nos. W-02259A-13-0138 and W-01303A-13-0138.

Appendix 1

Qualifications of Jeffrey M. Michlik, CPA

EDUCATION:

Idaho State University
Bachelor of Business Administration in Accounting
and Finance, 2000

Pennsylvania State University
Master of Arts in Administration of Justice, 1993

Pennsylvania State University
Bachelor of Science in Administration of Justice, 1991

EXPERIENCE:

Public Utilities Analyst V
Arizona Corporation Commission
May 2006 – September 2013

Senior Auditor
Heinfeld, Meech & Co.
April 2005 – April 2006

Auditor II
Office of the Auditor General
August 2000 – December 2004

Resume of cases currently assigned to or completed while at the Arizona Corporation Commission

Arizona Public Service Company, Class Size A, Docket No. E-01345A-10-0474

Area(s) assigned: Accounting Order; presented Staff's recommendation regarding the Company's application for an Accounting Order.

A. Peterson Water Company, Class Size E, Docket No. W-02678A-06-0546

Area(s) assigned: Revenue Requirement, Rate Base, and Rate Design; presented Staff's recommendations for these areas.

Appaloosa Water Company, Class Size C, Docket Nos. W-03443A-10-0143 and W-03443A-11-0040

Area(s) assigned: Revenue Requirement, Rate Base, Rate Design, and Financing; presented Staff's recommendations for these areas.

Arizona-American Water Company, Class Size A, Docket No. W-01303A-09-0343 et al.

Area(s) assigned: Rate Design; designed rates for all of Arizona-American's water and wastewater districts, on a stand-alone basis, partially consolidated basis, and on a consolidated basis; presented Staff's recommendations for this area.

Arizona-American Water Company, Class Size A, Docket No. W-01303A-10-0448 Area(s) assigned: Rate Design; designed rates for all three of Arizona-American's water and wastewater districts; presented Staff's recommendations for this area.

Arizona Water Company, Class Size A, Docket No. W-01445A-08-0440

Area(s) assigned: Rate Design; designed rates for 18 separate systems on a stand-alone basis and on a consolidated basis; presented Staff's recommendations for this area.

Arizona Water Company, Class Size A, Docket No. W-01445A-08-0440

Area(s) assigned: Step-2 Arsenic Cost Recovery Mechanism; presented Staff's recommendation regarding the Company's Application for Authority to implement a Step-2 Arsenic Cost Recovery Mechanism.

Arizona Water Company, Class Size A, Docket No. W-01445A-10-0517

Area(s) assigned: Revenue Requirement and Rate Base for three systems in the Company's Western Group; presented Staff's recommendations for these areas.

Arizona Water Company, Class Size A, Docket No. W-01445A-11-0092

Area(s) assigned: Accounting Order; presented Staff's recommendation regarding the Company's application for an Accounting Order.

Arizona Water Company, Class Size A, Docket No. W-01445A-11-0310

Area(s) assigned: Revenue Requirement and Rate Base for six systems in the Company's Eastern Group; presented Staff's recommendations for these areas.

Arizona Water Company, Class Size A, Docket No. W-01445A-12-0348

Area(s) assigned: Revenue Requirement, Rate Base, and Rate Design for two systems in the Company's Northern Group.

Clear Springs Utility Company, Class Size D, Docket Nos. W-01689A-11-0401 and W-01689A-11-0402

Area(s) assigned: Revenue Requirement, Rate Base, Rate Design, and Financing; presented Staff's recommendations for these areas.

DS Water Company, Class Size D, Docket No. W-04049A-08-0339

Area(s) assigned: Revenue Requirement, Rate Base, and Rate Design; presented Staff's recommendations for these areas.

Eagletail Water Company, L.L.C., Class Size E, Docket Nos. W-03936A-11-0418 and W-03936A-12-0073

Area(s) assigned: Infrastructure Surcharge Mechanism.

ESARIN, Class Size C, Docket No. W-02031A-10-0168 et al.

Area(s) assigned: Revenue Requirement, Rate Base, Rate Design, and Financing; presented Staff's recommendations for these areas.

Heart Cab Company, Class Size E, Docket No. W-02355A-09-0275

Area(s) assigned: Revenue Requirement, Rate Base, and Rate Design; presented Staff's recommendations for these areas.

Johnson Utilities, Class Size A, Docket No. WS-02987A-08-0180

Area(s) assigned: Revenue Requirement, Rate Base, and Rate Design; presented Staff's recommendations for these areas.

Litchfield Park Water Company, Class Size A, Docket No. W-01427A-06-0807

Area(s) assigned: Accounting Order; presented Staff's recommendation regarding the Company's application for an Accounting Order.

Litchfield Park Service Company, Class Size A, Docket No. W-01427A-09-0104 et al.

Area(s) assigned: Revenue Requirement, Rate Base, Rate Design, and Financing; presented Staff's recommendations for these areas.

Litchfield Park Service Company, Class Size A, Docket Nos. W-01427A-11-0419 and SW-01428A-11-0420

Area(s) assigned: Waiver of Affiliated Interest Rules; presented Staff's recommendation regarding the Company's application for a Waiver of Affiliated Interest Rules.

Litchfield Park Service Company, Class Size A, Docket Nos. W-01427A-13-0043 and SW-01428A-13-0042

Area(s) assigned: Revenue Requirement, Rate Base, and Rate Design, presented Staff's recommendations for these areas.

Livco Water Company, Class Size D, Docket No. W-02121A-07-0506

Area(s) assigned: Revenue Requirement, Rate Base, Rate Design, and Financing; presented Staff's recommendations for these areas.

Montezuma Rimrock Water, LLC, Docket Nos. W-04254A-08-0361 and W-04254A-08-0361 and W-04254A-11-0323

Area(s) assigned: Capital Lease Determination; presented Staff's recommendation on whether the Company's lease was a Capital Lease or Operating Lease.

Naco Water Company, Class Size C, Docket Nos. W-02860A-05-0727 et al.

Area(s) assigned: Revenue Requirement, Rate Base, Rate Design, and Financing; presented Staff's recommendations for these areas.

Payson Water Company, Inc., Size D, Docket No. W-03514A-12-0008

Area(s) assigned: Water Augmentation Surcharge; presented Staff's opinion on whether the Company's Water Augmentation Surcharge was calculated correctly.

Picacho Water Improvement Corporation

Area(s) assigned: Emergency Rate Case, presented Staff's recommended temporary/interim rates for the Company.

Pineview Water Company, Class Size C, Docket No. W-01676A-08-0366

Area(s) assigned: Revenue Requirement, Rate Base, and Rate Design; presented Staff's recommendations for these areas.

Rio Rico Utilities, Inc., Class Size A, Docket No. WS-02676A-12-0196

Area(s) assigned: Revenue Requirement, Rate Base, and Rate Design.

Rulemaking RW-00000B-07-0051

Area(s) assigned: Rulemaking; provided Staff's input to the restructuring of the Administrative Code regarding Certificates of Convenience and Necessity.

Sahuarita Water Company, Class Size B, Docket No. W-03718A-09-0359

Area(s) assigned: Revenue Requirement, Rate Base, and Rate Design; presented Staff's recommendations for these areas.

Sun Leisure Estates, Class Size E, Docket No. W-02386A-08-0129

Area(s) assigned: Emergency Rate Case, presented Staff's recommended temporary/interim rates for the Company.

Sun Leisure Estates, Class Size E, Docket No. W-02386A-09-0308

Area(s) assigned: Revenue Requirement, Rate Base, Rate Design, and Financing; presented Staff's recommendations for these areas.

Utility Source LLC, Class Size C, Docket No. WS-04325A-06-0303

Area(s) assigned: Revenue Requirement and Rate Base; presented Staff's recommendations for these areas.

Vail Water Company, Class Size B, Docket No. W-01651B-12-0339

Area(s) assigned: Revenue Requirement, Rate Base, and Rate Design.

Wayward Wind Wells, Class Size E, Docket No. W-20553A-08-0467

Area(s) assigned: Certificate of Convenience and Necessity; performed a financial analysis of the Company's application, and presented Staff's recommendations for a Certificate of Convenience and Necessity.

Wilhoit Water Company, Class Size D, Docket No. W-02065A-07-0312 et al.

Area(s) assigned: Revenue Requirement, Rate Base, Rate Design, and Financing; presented Staff's recommendations for these areas.

In addition, I have served as Advisory Staff to Commissioners and Administrative Law Judges.

Attachment A

| Aerial City Water Company Test Year Plant Additions Response to Data Request No. RUCO 4.01 | | | | | | | | | | | | | | Response to Data Request No. STF GB 3.2 | | | | | | | | | | | | | |
|--|--|-----|-----------------------------|--------------------------------------|------------------------------|-----------------------------|--|-----------------------------|------------|----------|-------------|---------------|--------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|
| ECT # | DESCRIPTION | [A] | Date Construction Began [B] | Completed or Expected Completion [C] | Ratepayer Benefit Period [D] | Replace Existing Plant? [E] | Actual Costs at the End of the Test Year [F] | Actual Costs at 7/31/13 [G] | Final Cost | Complete | In Svc Date | Used & Useful | Not Complete | | | | | | | | | | | | | | |
| | | | | | | | | | | a | b | c | d | | | | | | | | | | | | | | |
| 73 | Comprehensive Planning Study (Well 11 Restoration) | | Oct-11 | Jun-13 | At in-service date | No | | | 219,432 | x | Jul-13 | x | | | | | | | | | | | | | | | |
| 80 | Comprehensive Planning Study (Chloramination) | | Jul-12 | Jun-13 | At in-service date | No | 127,558 | 220,478 | | | | | | | | | | | | | | | | | | | |
| 93 | Comprehensive Planning Study | | Nov-12 | Jun-13 | At in-service date | No | | | | | | | | | | | | | | | | | | | | | |
| 74 | Well #10 Arsenic Treatment | | Oct-11 | Feb-13 | At in-service date | No | 793,374 | 1,014,949 | 1,069,580 | x | Feb-13 | x | | | | | | | | | | | | | | | |
| 70 | Reservoir #2 Rehabilitation | | Jun-11 | Apr-13 | At in-service date | No | 295,860 | 692,236 | 643,947 | x | May-13 | x | | | | | | | | | | | | | | | |
| 75 | Reservoir #2 Rehabilitation | | Aug-12 | Apr-13 | At in-service date | No | | | | | Apr-13 | x | | | | | | | | | | | | | | | |
| 70 | Reservoir #2 Rehabilitation | | Apr-13 | Apr-13 | At in-service date | No | | | | | | | | | | | | | | | | | | | | | |
| 75 | Distribution System | | Apr-12 | Dec-12 | At in-service date | No | 53,577 | 66,964 | 66,964 | x | Dec-12 | x | | | | | | | | | | | | | | | |
| 76 | Shea WTP Filter Media | | Mar-12 | Dec-12 | At in-service date | Yes | 59,369 | 73,035 | 73,035 | x | Dec-12 | x | | | | | | | | | | | | | | | |
| 31 | IPT Deployment | | Dec-12 | Apr-13 | At in-service date | No | 150 | 44,932 | 45,351 | x | Apr-13 | x | | | | | | | | | | | | | | | |
| 32 | Tools & Equipment | | Nov-12 | Dec-12 | At in-service date | No | 31,777 | 36,935 | 36,935 | x | Dec-12 | x | | | | | | | | | | | | | | | |
| 35 | Lotus Reservoir 3 | | | | At in-service date | No | 7,685 | | | | | | | | | | | | | | | | | | | | |
| 37 | Crestview Reservoir 7 | | | | At in-service date | No | 17,567 | | | | | | | | | | | | | | | | | | | | |
| 38 | Vehicles | | Dec-12 | Dec-12 | At in-service date | Yes | 9,248 | 9,637 | 9,637 | x | Dec-12 | x | | | | | | | | | | | | | | | |
| 36 | ESRI Project (GIS) | | | | At in-service date | No | 3,912 | | | | | | | | | | | | | | | | | | | | |
| 71 | Shea WTP Improvements | | Apr-13 | Dec-13 | At in-service date | No | | 688 | 676 | x | N/A | | | | | | | | | | | | | | | | |
| 72 | 2013 Recurring Projects - Facilities | | | Throughout 2013 | At in-service date | No | | | | | | | | | | | | | | | | | | | | | |
| 11 | Hydrants Replaced | | Jan-13 | Throughout 2013 | At in-service date | Yes | | 10,523 | 67,834 | | | | x | | | | | | | | | | | | | | |
| 17 | Services Replaced | | Jan-13 | Throughout 2013 | At in-service date | Yes | | 81,675 | 530,835 | | | | x | | | | | | | | | | | | | | |
| 14 | Meters Replaced | | Jan-13 | Throughout 2013 | At in-service date | Yes | | 28,274 | 74,450 | | | | x | | | | | | | | | | | | | | |
| 10 | Distribution Improvements | | Jan-13 | Throughout 2013 | At in-service date | Some | | 1,453 | 1,453 | | | | x | | | | | | | | | | | | | | |
| 13 | Misc system improvements | | Feb-13 | Throughout 2013 | At in-service date | Yes | | 212,350 | 239,877 | | | | x | | | | | | | | | | | | | | |
| 12 | Main breaks | | Jan-13 | Throughout 2013 | At in-service date | Yes | | 93,715 | 129,353 | | | | x | | | | | | | | | | | | | | |
| 13 | Manholes replaced | | | Throughout 2013 | At in-service date | Yes | | | | | | | x | | | | | | | | | | | | | | |
| 5 | Office & Ops Center | | Apr-13 | Throughout 2013 | At in-service date | No | | 39,378 | 65,193 | | | | x | | | | | | | | | | | | | | |
| 6 | Security | | | Throughout 2013 | At in-service date | No | | | | | | | x | | | | | | | | | | | | | | |
| 8 | Tools & Equipment | | Apr-13 | Throughout 2013 | At in-service date | No | | 42,993 | 43,339 | | | | x | | | | | | | | | | | | | | |
| 9 | Valves new | | Feb-13 | Throughout 2013 | At in-service date | No | | 4,633 | 3,963 | | | | x | | | | | | | | | | | | | | |
| 0 | Valves replaced | | Feb-13 | Throughout 2013 | At in-service date | Yes | | 144,905 | 191,775 | | | | x | | | | | | | | | | | | | | |
| 1 | Mains scheduled | | Jun-13 | Throughout 2013 | At in-service date | Yes | | 53,290 | 67,133 | | | | x | | | | | | | | | | | | | | |
| 4 | Scada & Firewall | | May-13 | Throughout 2013 | At in-service date | No | | 10,240 | 42,892 | | | | x | | | | | | | | | | | | | | |
| 5 | Vehicles | | | Throughout 2013 | At in-service date | No | | | | | | | | | | | | | | | | | | | | | |
| 1 | Electrical Annual Program Developer Funded | | | Throughout 2013 | At in-service date | No | | | | | | | | | | | | | | | | | | | | | |
| | | | | | At in-service date | No | 212,867 | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | 1,612,944 | 2,883,283 | 3,650,127 | | | | | | | | | | | | | | | | | | |

Attachment B

UNS Electric, Inc.
Cash Working Capital - Lead/Lag Study
Test Year Ended December 31, 2008

| Line No. | Description | (A) | Pro Forma Test Year Amount | (B) | Revenue Lag Days | (C) | Expense Lag Days | (D) | Net Lag Days (Col. C - Col. D) | (E) | Lead/Lag Factor (Col. E/365) | (F) | Cash Working Capital Required (Col. F x Col. B) | (G) | Line No. |
|----------|--|-----|----------------------------|----------------------|------------------|-----|------------------|-----|--------------------------------|-----|------------------------------|-----|---|-----|----------|
| 1 | Operating Expenses | | | | | | | | | | | | | | 1 |
| 2 | Non-Cash Expenses | | | | | | | | | | | | | | 2 |
| 3 | Bad Debts Expense | | | \$764,063 | | | | | | | | | | | 3 |
| 4 | Depreciation | | | 17,810,236 | | | | | | | | | | | 4 |
| 5 | Amortization | | | (3,575,014) | | | | | | | | | | | 5 |
| 6 | Deferred Income Taxes | | | 3,384,947 | | | | | | | | | | | 6 |
| 7 | Other Operating Expenses | | | | | | | | | | | | | | 7 |
| 8 | Salaries and Wages (UNSE Direct Employees) | | | 4,828,118 | 35.59 | | 23.33 | | 12.26 | | 0.0336 | | \$162,225 | | 8 |
| 9 | Incentive Pay (UNSE Direct Employees) | | | 109,736 | 35.59 | | 267.00 | | (231.41) | | (0.6340) | | (\$69,573) | | 9 |
| 10 | Purchased Power | | | 95,598,854 | 35.59 | | 33.79 | | 1.80 | | 0.0049 | | \$488,434 | | 10 |
| 11 | Transmission Other | | | 8,082,997 | 35.59 | | 40.67 | | (5.08) | | (0.0139) | | (\$112,354) | | 11 |
| 12 | Meter Reading | | | 839,177 | 35.59 | | 33.67 | | 1.92 | | 0.0053 | | \$4,448 | | 12 |
| 13 | Customer Records & Collection Expenses (excluding allocations) | | | 1,389,213 | 35.59 | | 34.94 | | 0.65 | | 0.0018 | | \$2,501 | | 13 |
| 14 | Office Supplies and Expenses | | | 505,643 | 35.59 | | 50.89 | | (15.30) | | (0.0419) | | (\$21,188) | | 14 |
| 15 | Injuries and Damages | | | 309,105 | 35.59 | | 70.52 | | (34.93) | | (0.0957) | | (\$29,581) | | 15 |
| 16 | Pensions and Benefits | | | 1,166,578 | 35.59 | | 51.37 | | (15.78) | | (0.0432) | | (\$50,398) | | 16 |
| 17 | Support Services - TEP (Direct Labor, Burdens, System Alloc.) | | | 6,217,822 | 35.59 | | 44.77 | | (9.16) | | (0.0252) | | (\$186,889) | | 17 |
| 18 | Property Taxes | | | 3,307,989 | 35.59 | | 213.00 | | (177.41) | | (0.4848) | | (\$1,603,548) | | 18 |
| 19 | Payroll Taxes | | | 445,648 | 35.59 | | 19.87 | | 15.72 | | 0.0431 | | \$19,207 | | 19 |
| 20 | Current Income Taxes | | | (1,263,660) | 35.59 | | 41.42 | | (5.83) | | (0.0160) | | \$20,219 | | 20 |
| 21 | Interest on Customer Deposits | | | 14,499 | 35.59 | | 182.50 | | (146.91) | | (0.4025) | | (\$5,838) | | 21 |
| 22 | Other Operations and Maintenance | | | 10,986,786 | 35.59 | | 41.21 | | (5.62) | | (0.0154) | | (\$189,197) | | 22 |
| 23 | Total Operating Expenses | | | <u>\$150,922,718</u> | | | | | | | | | | | 23 |
| 24 | Other Cash Working Capital Elements: | | | | | | | | | | | | | | 24 |
| 25 | Interest On Long-Term Debt | | | \$6,716,282 | 35.59 | | 78.97 | | (43.38) | | (0.1188) | | (797,894) | | 25 |
| 26 | Revenue Taxes and Assessments | | | \$12,430,745 | 35.59 | | 49.43 | | (13.84) | | (0.0379) | | (471,125) | | 26 |
| 27 | Total Cash Working Capital | | | | | | | | | | | | <u>(\$2,810,346)</u> | | 27 |

Supporting Schedules
N/A

Recap Schedules
B-2, B-3

Attachment C

Company: _____

Decision No.: _____

Phone: _____

Effective Date: _____

Adult Education and Training Programs Tariff – BMP 2.1

PURPOSE

A program for the Company to implement adult education and training programs which promote water conservation and the need to conserve (Modified Non-Per Capita Conservation Program BMP Category 2: Conservation Education and Training 2.1: Adult Education and Training Programs).

REQUIREMENTS

The requirements of this tariff are governed by Rules of the Arizona Corporation Commission and were adapted from the Arizona Department of Water Resources' Required Public Education Program and Best Management Practices in the Modified Non-Per Capita Conservation Program.

1. Programs shall include a combination of efforts to provide adults within the Company's service area with hands-on training. This shall include free workshops (held at least twice annually) that emphasize water efficient outdoor landscaping for homeowners and landscape professionals. Programs shall target homeowners, landscape professionals and non-residential users in the Company's service area.
2. The Company shall make available at no charge to its customers free pamphlets covering water conservation, reclaimed water, leak detection, irrigation, landscape design and low water use plants. This literature shall be available at Company offices during regular business hours, at model home sites, libraries, chambers of commerce, at the Company provided workshops, and at community events.
3. The Company shall make available Self-Audit Kits and Guides for homeowners in its service area.
4. The Company shall keep a record of the following information and make it available to the Commission upon request.
 - a. A description of the adult conservation education process implemented.
 - b. The number of customers reached (or an estimate).
 - c. A description of the written material and hands-on training provided free to customers.
 - d. Implementation costs of the adult education and training programs.

Company: _____

Decision No.: _____

Phone: _____

Effective Date: _____

Residential Audit Program Tariff – BMP 3.1

PURPOSE

A program for the Company to promote water conservation by providing customers with information on performing water audits to determine conservation opportunities at their residence (Modified Non-Per Capita Conservation Program BMP Category 3: Outreach Services 3.1: Residential Audit Program).

REQUIREMENTS

The requirements of this tariff are governed by Rules of the Arizona Corporation Commission and were adapted from the Arizona Department of Water Resources' Required Public Education Program and Best Management Practices in the Modified Non-Per Capita Conservation Program.

1. The Company shall offer self-audit information.
2. The Company or designated representative shall provide all customers that request them with a self-audit kit.
3. The kit shall include detailed instructions and tools for completing the water audit including information on how to check their water meter. The audit kit shall include but not be limited to information on checking the following components: irrigation system, pool, water features, toilets, faucets and shower.
4. If requested, the Company shall assist the customer in a self-water audit and assist the customer in determining what might be causing high water usage as well as supply customer with information regarding water conservation and landscape watering guidelines. As part of the water audit, and if requested to do so by the customer, the Company shall confirm the accuracy of the customer meter (applicable meter testing fees shall apply).
5. The Company shall keep a record of the following information and make it available upon request.
 - a. A description of the water conservation material provided in the kit.
 - b. The number of kits provided to customers.
 - c. Implementation costs of the Residential Audit Program.

Attachment D

COMPANY: CHAPARRAL CITY WATER COMPANY
DOCKET NO: W-02113A-13-0118

Response provided by: Sheryl L. Hubbard
Title: Director, Regulatory & Rates

Address: 2355 W. Pinnacle Peak Road, Suite 300
Phoenix, AZ 85027

Company Response Number: RUCO 3.01

Q: Plant Additions and Deletions - This is a follow-up to Staff data request 3.28 which asked the following:

"Refer to Schedules B-2 pages 3.2 through 3.5 and provide a list that breaks out the components and amounts that comprise the plant additions and deletions by year since the last Rate Case."

The Company responded as follows:

"We have plant additions and deletions from Jan 2011 through Dec 2012. See attached schedule labeled "STF GB 3.28 Plant Additions and Deletions.xls".

Please provide RUCO with the following information:

- a. The balances of the plant accounts by line item (e.g. account 307 wells), and accumulated depreciation balances by plant account line item from the last rate case, Decision No. 71308, dated October, 21, 2009.
 - b. Please provide RUCO an excel schedule that shows the Plant additions and deletions by plant account for the prior years 2007, 2008, 2009, and 2010.
 - c. Please provide RUCO with a detailed excel transaction sub ledger for each plant addition from b. above.
- A:**
- a. The balances of the plant accounts and accumulated depreciation by plant account line item from the last rate case, Decision No. 71308 is attached and labeled "RUCO 3.01 a. Plant and Accum Depr (Dec 71308).xls".
 - b. The Company is still waiting for a response to its request to Golden State Water Company for assistance in providing the plant additions and deletions by plant account for the prior years 2007, 2008, 2009, and 2010. This information will be provided as a supplement to this response as soon as it is received.
 - c. The Company is still waiting for a response to its request to Golden State Water Company for assistance in providing the subledger detail for each plant addition requested in b. above. This information will be provided as a supplement to this response as soon as it is received.

COMPANY: CHAPARRAL CITY WATER COMPANY
DOCKET NO: W-02113A-13-0118

Response provided by: Sheryl L. Hubbard
Title: Director, Regulatory & Rates

Address: 2355 W. Pinnacle Peak Road, Suite 300
Phoenix, AZ 85027

Company Response Number: RUCO 3.01 Subparts b. & c. 1st Supplement

Q: Plant Additions and Deletions - This is a follow-up to Staff data request 3.28 which asked the following:

"Refer to Schedules B-2 pages 3.2 through 3.5 and provide a list that breaks out the components and amounts that comprise the plant additions and deletions by year since the last Rate Case."

The Company responded as follows:

"We have plant additions and deletions from Jan 2011 through Dec 2012. See attached schedule labeled "STF GB 3.28 Plant Additions and Deletions.xls".

Please provide RUCO with the following information:

- a. The balances of the plant accounts by line item (e.g. account 307 wells), and accumulated depreciation balances by plant account line item from the last rate case, Decision No. 71308, dated October, 21, 2009.
 - b. Please provide RUCO an excel schedule that shows the Plant additions and deletions by plant account for the prior years 2007, 2008, 2009, and 2010.
 - c. Please provide RUCO with a detailed excel transaction sub ledger for each plant addition from b. above.
- A:**
- b. The plant additions and deletions by plant account for the prior years 2007, 2008, 2009, and 2010 are summarized in the attached file labeled "RUCO 3.01 b. & c. CCWC Plant Data 2007-2010.xlsx".
 - c. The subledger detail for each plant addition is included in the file labeled "RUCO 3.01 b. & c. CCWC Plant Data 2007-2010.xlsx" provided in response to subpart b. above.

COMPANY: CHAPARRAL CITY WATER COMPANY
DOCKET NO: W-02113A-13-0118

Response provided by: Sheryl L. Hubbard
Title: Director, Regulatory & Rates

Address: 2355 W. Pinnacle Peak Road, Suite 300
Phoenix, AZ 85027

Company Response Number: RUCO 3.01 Subparts b. 2nd Supplement Page 1 of 2

Q: Plant Additions and Deletions - This is a follow-up to Staff data request 3.28 which asked the following:

"Refer to Schedules B-2 pages 3.2 through 3.5 and provide a list that breaks out the components and amounts that comprise the plant additions and deletions by year since the last Rate Case."

The Company responded as follows:

"We have plant additions and deletions from Jan 2011 through Dec 2012. See attached schedule labeled "STF GB 3.28 Plant Additions and Deletions.xls".

Please provide RUCO with the following information:

- a. The balances of the plant accounts by line item (e.g. account 307 wells), and accumulated depreciation balances by plant account line item from the last rate case, Decision No. 71308, dated October, 21, 2009.
- b. Please provide RUCO an excel schedule that shows the Plant additions and deletions by plant account for the prior years 2007, 2008, 2009, and 2010.
- c. Please provide RUCO with a detailed excel transaction sub ledger for each plant addition from b. above.

A: b. The plant additions and deletions by plant account for the prior years 2007, 2008, 2009, and 2010 are summarized in the attached file labeled "RUCO 3.01 b. & c. CCWC Plant Data 2007-2010 2nd Supp.xlsx". This file consists of 2 tabs labeled "2007 – 2012 Summary" and "Rollforward". The 2007 – 2012 Summary tab sets for the annual additions, retirements, and adjustments to plant in service for the years 2007 through 2012 (2011 and 2012 have been included for your convenience.

The adjustments to the original cost plant in service arising from the Commission's Decision No. 71308 issued October 21, 2009 have been highlighted as they were recorded in 2009 upon receipt of the Commission's decision.

Any differences in the computed plant balances by year and the ACC Annual Reports have been reconciled and appear to be classification-only differences.

COMPANY: CHAPARRAL CITY WATER COMPANY
DOCKET NO: W-02113A-13-0118

Response provided by: Sheryl L. Hubbard
Title: Director, Regulatory & Rates

Address: 2355 W. Pinnacle Peak Road, Suite 300
Phoenix, AZ 85027

Company Response Number: RUCO 3.01 Subparts b. 2nd Supplement Page 2 of 2

The Rollforward tab summarizes additions, retirements, and adjustments as are shown on the 2007 – 2012 Summary tab, but also includes the authorized original cost plant balances. It appears from this analysis that the previous owners were diligent in insuring that the plant balances that were recorded on the books of Chaparral City Water Company at May 31, 2011 at the time of the sale to EPCOR Water properly reflected all of the adjustments that were ordered by the ACC in Decision No. 71308.

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Company Response Number: RUCO 7.02

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Q: Plant Additions and Deletions – This is a follow-up data request to the supplemental information provided by the Company to RUCO data request 3.1. Please provide the following information:

- a. Please explain the various highlighted cells on the rollforward excel tab in the RUCO 3.01 b. and c. CCWC Plant data 2007 – 2010 2nd Supp excel worksheet (e.g. the ending balance in 2007 for account 305 collecting and impounding reservoirs in the amount of \$6,548 is highlighted in blue)?
- b. Explain and reconcile the differences between the Company's year end balances for each plant account line item and those submitted to the Arizona Corporation Commission ("ACC") for each year (e.g. account 311 pumping equipment ending balance December 2008 \$3,472,801, 2008 ACC annual report \$5,278,130 difference \$1,805,329)?
- c. Please explain why the Company believes its recalculated plant numbers for each plant account by year should be used instead of the plant numbers that appear in the annual reports submitted to the ACC?
- d. Please explain why there is no activity in account 309 supply mains until 2011 when \$2,201,526 is reported in the 2011 ACC annual report.
- e. Please explain why the Company removed the \$2,201,526 in supply mains in its recalculation of plant additions and deletions?

A: a. The highlighted cells are color coded to reflect reporting differences between the plant account distribution used in the CCWC 2006 test year rate case and the rollforward year over year of plant additions, retirements and adjustments. When all of the same colored highlights are added together, the result is \$0 which means it is a reporting difference only.

For instance, in 2007 CCWC had a balance of \$6,548 in Account 305-Collecting and Impounding Reservoirs, but for reporting purposes, Account 305 was reported as Account 330-Distribution Reservoirs & Standpipes. Also in 2007, the balance in Account 347-Miscellaneous Equipment of \$329,385, was reported in Account 339-Other Plant & Misc. Equipment.

Likewise, for the year 2008, the \$6,548 balance in Account 305-Collecting and Impounding Reservoirs was reported in two accounts: 1) \$5,252 in Account 307-Wells, and 2) \$1,295, the remainder, reported in Account 330-Distribution Reservoirs & Standpipes. Also, the balances in Account 347-

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Miscellaneous Equipment of \$329,385, and \$1,475,943 in Account 339-Other Plant & Misc. Equipment totaling \$1,805,329 were reported in Account 311-Pumping Equipment. The Power Operated Equipment balance (Account 345) of \$18,396 was reported as Account 343-Tools, Shop & Garage Equipment.

In 2009, the highlighted values reflect the same reporting classifications as 2008 except that the Account 305-Collecting and Impounding Reservoirs of \$6,548 is reported in one account: 1) \$6,547 in Account 330-Distribution Reservoirs & Standpipes.

In 2010, the same accounts as in prior years have been reclassified for reporting purposes, however, the amounts have changed to reflect the additions to the accounts during 2010. To recap, the \$6,548 balance in Account 305-Collecting and Impounding Reservoirs was reported in Account 307-Wells, the balances in Account 347-Miscellaneous Equipment of \$380,435 (\$329,385 + \$38,743 of additions), and \$1,444,950 in Account 339-Other Plant & Misc. Equipment totaling \$1,825,386 were reported in Account 311-Pumping Equipment. The Power Operated Equipment balance (Account 345) of \$18,396 was still reported as Account 343-Tools, Shop & Garage Equipment in 2010.

In 2011 when EPCOR purchased CCWC, additional reporting classifications were made. \$16,514 of Account 304-Structures & Improvements were reported as Account 320-Water Treatment Plant, \$3,207,220 of Account 330-Distribution Reservoirs & Standpipes were reported as Account 305-Collecting and Impounding Reservoirs of \$1,005,693 and Account 309 – Supply Mains of \$2,201,526. The reporting differences in Pumping Equipment (Account 311), Other Plant & Misc. Equipment (Account 339), and Miscellaneous Equipment (Account 347) continued in 2011.

- b. Chaparral City Water Company, under the ownership of EPCOR water is unable to “explain” the differences, but can see from the comparison of the rollforward that the Plant in Service ties in total to the reported amounts in Golden States Water Company’s filed annual reports for CCWC.

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- c. The test year plant balances on Schedule E-5 are consistent with the amounts reflected in the 2012 Annual Report except for Account 347000-Other General Plant with an ending balance of \$41,221 which should have been included in Account 339500-Other Transmission & Distribution Plant. This was an oversight when linking the schedule to the supporting file as there was a notation that the value should be included in account 339500. It is difficult to say with any certainty, why there are reclassification differences in the intervening years due to the change in ownership. Oftentimes, the responsibility for preparing the annual report may change year over year and when the accounting system is not maintained on a NARUC basis, one employee may roll the accounts up differently than another. When EPCOR purchased CCWC in June 2011, the assets were classified in the manner in which they are presented in this application and they appear to be relatively similar to the reporting when Golden States had ownership with consistent differences.
- d. I cannot say with any certainty why supply mains were not reflected in the annual report for CCWC prior to the purchase by EPCOR in 2011. In response to data request number STF GB 3.28, tab labeled "Detailed Cost - Dec. 31, 2010", there were clearly \$2,201,526 in assets purchased prior to 2010 that were classified as Supply Mains as reflected in the table below.

| Asset # | Class Description | Description | Acquired date | Cost |
|---------|-------------------|-----------------------------------|---------------|--------------|
| 51850 | Supply Mains | Cap Plant (Supply Main) | 31-Dec-86 | 337,653.63 |
| 51849 | Supply Mains | Bureau of reclamation plant | 31-Mar-87 | 1,749,900.00 |
| 51847 | Supply Mains | Supply Main 1987 | 31-Dec-87 | 17,482.04 |
| 51848 | Supply Mains | Supply Main 1989 | 31-Jan-89 | 14,257.57 |
| 65641 | Supply Mains | CLA-VAL 6" Class 150 Flanged | 30-Apr-07 | 9,003.06 |
| 65642 | Supply Mains | CLA-VAL 1 1/2" Class 300 Threaded | 30-Apr-07 | 3,700.90 |
| 65643 | Supply Mains | CLA-VAL 1 1/2" Class 300 Threaded | 30-Apr-07 | 3,517.93 |
| 65914 | Supply Mains | Transmission main | 30-Jun-07 | 45,104.85 |
| 66565 | Supply Mains | 12" transmission main | 30-Mar-08 | 20,905.68 |
| Total | | | | 2,201,525.66 |

- e. The schedules provided in response to RUCO 3.01 b. and c. for the years 2007 - 2010 were created from information provided by Golden States

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Water Company to respond to RUCO's data request for plant information prior to the purchase by EPCOR in June of 2011. The information provided by Golden States was compared to their annual reports filed with the Arizona Corporation Commission ("ACC") to insure there was some consistency in the data but is not information that EPCOR created on its own. For purposes of this case, the Company relies on the test year data filed in its standard filing requirements which is supported by continuing property records at December 31, 2010 which included the adjustments adopted by the ACC in the last CCWC rate case.

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Company Response Number: RUCO 8.01

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Q: Plant Additions and Deletion Invoices - This is a follow-up to RUCO data request 7.04 in which RUCO asked the following question:

"Please provide the support (i.e. invoices), for all plant additions over \$5,000 since the Company's last rate case. The invoice amounts should trace and tie to the excel spreadsheet detail provided in data request 7.03."

The Company responded by stating:

"An information request has been sent to Golden States Water Company for this information and this request will be supplemented when a response has been received."

Thank you for the information you provided, however it is not fully responsive to RUCO's data request. RUCO needs this information to prepare its testimony. At this date, the Company has not provided RUCO with any invoices to support their plant. In the event that this information is not provided in a timely manner, the result maybe denial of some or all the plant requested.

Please provide the support (i.e. invoices), for all plant additions over \$5,000 in which the Company is in possession of since it acquired Chaparral City Water Company (i.e. 2011 and 2012 additions) from Golden States Water Company.

In addition, please provide an improved detailed sub-ledger (the Company's attached excel response to Staff data request 3.28 is confusing and not in an accessible format), for each plant addition recorded by the Company in year 2011 and 2012. The plant addition sub-ledgers should reconcile to the amounts presented in the Company's response to RUCO data request 3.01 (e.g. 2012 plant addition account 331 Transmission and Distribution Mains in the amount of \$977,835).

The invoice amounts should trace and tie to the excel sub-ledger detail requested. If not please reconcile the differences.

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Title: Director, Regulatory & Rates

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Company Response Number: RUCO 8.01

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- A. Invoices in support of plant additions over \$5,000 that Chaparral City Water Company has incurred since it was acquired from American States Water Company are summarized in the attached file labeled "RUCO 8.01 CCWC Capital Invoices Jun 2011 – Dec 2012.xlsx".

An improved detailed sub-ledger Plant Additions & Deletions.xlsx" summarizing each plant addition recorded by the Chaparral City Water Company from June 2011 through December 2012 remains to be provided. A reconciliation of this request to RUCO 3.01 is in progress.

SCHEDULES

| | |
|---|--------|
| Revenue Requirement..... | JMM-1 |
| Gross Revenue Conversion Factor..... | JMM-2 |
| Rate Base – Original Cost..... | JMM-3 |
| Summary of Original Cost Rate Base Adjustments..... | JMM-4 |
| Rate Base Adjustment No. 1 – Post-Test Year Plant and Accumulated Depreciation | JMM-5 |
| Rate Base Adjustment No. 2 – Retirement of Transportation Vehicles | JMM-6 |
| Rate Base Adjustment No. 3 – Customer Deposits | JMM-7 |
| Rate Base Adjustment No. 4 – Removal of Deferred Central Arizona Project (“CAP”) Maintenance and Industrial (“M&I”) Charges | JMM-8 |
| Rate Base Adjustment No. 5 – Removal of 24 Month Deferral of Allowance for Funds Used During Construction (“AFUDC”) and Depreciation Expense..... | JMM-9 |
| Rate Base Adjustment No. 6 – Cash Working Capital | JMM-10 |
| Operating Income Statement – Adjusted Test Year and Staff Recommended..... | JMM-11 |
| Summary of Operating Income Statement Adjustments – Test Year..... | JMM-12 |
| Operating Income Adj. No. 1 – Reverse Declining Usage Adjustment | JMM-13 |
| Operating Income Adj. No. 2 – Incentive Pay..... | JMM-14 |
| Operating Income Adj. No. 3 – Purchased Water Expense..... | JMM-15 |
| Operating Income Adj. No. 4 – Corporate Allocation Expense | JMM-16 |
| Operating Income Adj. No. 5 – Remove Conservation Expense | JMM-17 |
| Operating Income Adj. No. 6 – Remove Tank Maintenance | JMM-18 |
| Operating Income Adj. No. 7 – Depreciation Expense | JMM-19 |
| Operating Income Adj. No. 8 – Property Tax Expense | JMM-20 |
| Operating Income Adj. No. 9 – Test Year Income Taxes | JMM-21 |

REVENUE REQUIREMENT

| LINE NO. | DESCRIPTION | (A) COMPANY FAIR VALUE | (B) RUCO FAIR VALUE |
|-------------|---------------------------------------|---------------------------------|------------------------------|
| 1 | Adjusted Rate Base | \$ 27,269,321 | \$ 24,762,495 |
| 2 | Adjusted Operating Income (Loss) | \$ 889,596 | \$ 1,162,080 |
| 3 | Current Rate of Return (L2 / L1) | 3.26% | 4.69% |
| 4 | Required Rate of Return | 10.21% | 8.70% |
| 5 | Required Operating Income (L4 * L1) | \$ 2,783,254 | \$ 2,154,337 |
| 6 | Operating Income Deficiency (L5 - L2) | \$ 1,893,658 | \$ 992,257 |
| 7 | Gross Revenue Conversion Factor | 1.6587 | 1.6496 |
| 8 | Required Revenue Increase (L7 * L6) | \$ 3,141,028 | \$ 1,636,808 |
| 9 | Adjusted Test Year Revenue | \$ 9,014,985 | \$ 9,080,945 |
| 10 | Proposed Annual Revenue (L8 + L9) | \$ 12,156,013 | \$ 10,717,753 |
| 11 | Required Increase in Revenue (%) | 34.84% | 18.02% |

References:

Column (A): Company Schedule A-1

Column (B): Staff Schedules JMM-3 and JMM-11

GROSS REVENUE CONVERSION FACTOR

| LINE NO. | DESCRIPTION | (A) | (B) | (C) | (D) |
|--|--|---------------|--------------|---------------|-----|
| <u>Calculation of Gross Revenue Conversion Factor:</u> | | | | | |
| 1 | Revenue | 100.0000% | | | |
| 2 | Uncollectible Factor (Line 11) | 0.5492% | | | |
| 3 | Revenues (L1 - L2) | 99.4508% | | | |
| 4 | Combined Federal and State Income Tax and Property Tax Rate (Line 23) | 38.8293% | | | |
| 5 | Subtotal (L3 - L4) | 60.6214% | | | |
| 6 | Revenue Conversion Factor (L1 / L5) | 1.649581 | | | |
| <u>Calculation of Uncollectible Factor:</u> | | | | | |
| 7 | Unity | 100.0000% | | | |
| 8 | Combined Federal and State Tax Rate (Line 23) | 38.2900% | | | |
| 9 | One Minus Combined Income Tax Rate (L7 - L8) | 61.7100% | | | |
| 10 | Uncollectible Rate | 0.8900% | | | |
| 11 | Uncollectible Factor (L9 * L10) | 0.5492% | | | |
| <u>Calculation of Effective Tax Rate:</u> | | | | | |
| 12 | Operating Income Before Taxes (Arizona Taxable Income) | 100.0000% | | | |
| 13 | Arizona State Income Tax Rate | 6.5000% | | | |
| 14 | Federal Taxable Income (L12 - L13) | 93.5000% | | | |
| 15 | Applicable Federal Income Tax Rate (Line 55) | 34.0000% | | | |
| 16 | Effective Federal Income Tax Rate (L14 x L15) | 31.7900% | | | |
| 17 | Combined Federal and State Income Tax Rate (L13 + L16) | | 38.2900% | | |
| <u>Calculation of Effective Property Tax Factor</u> | | | | | |
| 18 | Unity | 100.0000% | | | |
| 19 | Combined Federal and State Income Tax Rate (L17) | 38.2900% | | | |
| 20 | One Minus Combined Income Tax Rate (L18-L19) | 61.7100% | | | |
| 21 | Property Tax Factor | 0.8740% | | | |
| 22 | Effective Property Tax Factor (L20*L21) | | 0.5393% | | |
| 23 | Combined Federal and State Income Tax and Property Tax Rate (L17+L22) | | | 38.8293% | |
| 24 | Required Operating Income | \$ 2,154,337 | | | |
| 25 | Adjusted Test Year Operating Income (Loss) | 1,162,080 | | | |
| 26 | Required Increase in Operating Income (L24 - L25) | | \$ 992,257 | | |
| 27 | Income Taxes on Recommended Revenue (Col. [E], L52) | \$ 1,183,082 | | | |
| 28 | Income Taxes on Test Year Revenue (Col. [B], L52) | 567,404 | | | |
| 29 | Required Increase in Revenue to Provide for Income Taxes (L27 - L28) | | 615,678 | | |
| 30 | Recommended Revenue Requirement | \$ 1,636,808 | | | |
| 31 | Uncollectible Rate (Line 10) | 0.8900% | | | |
| 32 | Uncollectible Expense on Recommended Revenue (L30*L31) | \$ 14,568 | | | |
| 33 | Adjusted Test Year Uncollectible Expense | \$ - | | | |
| 34 | Required Increase in Revenue to Provide for Uncollectible Exp. (L32-L33) | | 14,568 | | |
| 35 | Property Tax with Recommended Revenue | \$ 254,521 | | | |
| 36 | Property Tax on Test Year Revenue | 240,216 | | | |
| 37 | Increase in Property Tax Due to Increase in Revenue (L35-L36) | | 14,306 | | |
| 38 | Total Required Increase in Revenue (L26 + L29 + L34 + L37) | | \$ 1,636,808 | | |
| <u>Calculation of Income Tax:</u> | | | | | |
| 39 | Revenue | \$ 9,080,945 | \$ 1,636,808 | \$ 10,717,753 | |
| 40 | Operating Expenses Excluding Income Taxes | \$ 7,351,461 | | \$ 7,380,334 | |
| 41 | Synchronized Interest (L56) | \$ 247,625 | | \$ 247,625 | |
| 42 | Arizona Taxable Income (L39 - L40 - L41) | \$ 1,481,860 | | \$ 3,089,795 | |
| 43 | Arizona State Income Tax Rate | 6.5000% | | 6.5000% | |
| 44 | Arizona Income Tax (L42 x L43) | \$ 96,321 | | \$ 200,837 | |
| 45 | Federal Taxable Income (L42 - L44) | \$ 1,385,539 | | \$ 2,888,958 | |
| 46 | Federal Tax on First Income Bracket (\$1 - \$50,000) @ 15% | \$ 7,500 | | \$ 7,500 | |
| 47 | Federal Tax on Second Income Bracket (\$51,001 - \$75,000) @ 25% | \$ 6,250 | | \$ 6,250 | |
| 48 | Federal Tax on Third Income Bracket (\$75,001 - \$100,000) @ 34% | \$ 8,500 | | \$ 8,500 | |
| 49 | Federal Tax on Fourth Income Bracket (\$100,001 - \$335,000) @ 39% | \$ 91,650 | | \$ 91,650 | |
| 50 | Federal Tax on Fifth Income Bracket (\$335,001 - \$10,000,000) @ 34% | \$ 357,183 | | \$ 868,346 | |
| 51 | Total Federal Income Tax | \$ 471,083 | | \$ 982,246 | |
| 52 | Combined Federal and State Income Tax (L44 + L51) | \$ 567,404 | | \$ 1,183,082 | |
| 53 | Applicable Federal Income Tax Rate [Col. [E], L51 - Col. [B], L51] / [Col. [E], L45 - Col. [B], L45] | | | 34.0000% | |
| <u>Calculation of Interest Synchronization:</u> | | | | | |
| 54 | Rate Base | \$ 24,762,495 | | | |
| 55 | Weighted Average Cost of Debt | 1.0000% | | | |
| 56 | Synchronized Interest (L45 X L46) | \$ 247,625 | | | |

Chaparral City Water Company
Docket No. W-02113A-13-0118
Test Year Ended: December 31, 2012

Schedule JMM-3

RATE BASE - ORIGINAL COST

| LINE NO. | | (A) COMPANY AS FILED | (B) RUCO ADJUSTMENTS | (C) RUCO AS ADJUSTED |
|-------------|---|-------------------------------|----------------------------|-------------------------------|
| 1 | Plant in Service | \$ 69,502,064 | \$ (1,770,756) | \$ 67,731,308 |
| 2 | Less: Accumulated Depreciation | 25,734,123 | (38,739) | 25,695,384 |
| 3 | Net Plant in Service | <u>\$ 43,767,940</u> | <u>\$ (1,732,017)</u> | <u>\$ 42,035,924</u> |
| 4 | | | | |
| 5 | <u>LESS:</u> | | | |
| 6 | | | | |
| 7 | Contributions in Aid of Construction (CIAC) | \$ 14,991,871 | \$ - | \$ 14,991,871 |
| 8 | Less: Accumulated Amortization | 2,529,950 | - | \$ 2,529,950 |
| 9 | Net CIAC | <u>12,461,921</u> | <u>-</u> | <u>\$ 12,461,921</u> |
| 10 | | | | |
| 11 | Advances in Aid of Construction (AIAC) | 4,008,916 | - | 4,008,916 |
| 12 | | | | |
| 13 | Customer Meter Deposits | 1,950 | 3,791 | 5,741 |
| 14 | Customer Deposits | - | - | - |
| 15 | Deferred Income Taxes & Credits | 1,271,696 | - | 1,271,696 |
| 17 | FHSD Settlement | 449,580 | | 449,580 |
| 18 | | | | |
| 19 | <u>ADD:</u> | | | |
| 20 | | | | |
| 21 | | | | |
| 22 | Deferred Debits | 686,104 | (686,104) | - |
| 23 | | | | |
| 24 | Working Capital Allowance | 1,009,341 | (84,917) | 924,424 |
| 25 | | | | |
| 26 | | | | |
| 27 | Original Cost Rate Base | <u>\$ 27,269,321</u> | <u>\$ (2,506,826)</u> | <u>\$ 24,762,495</u> |

References:

Column [A]: Company as Filed

Column [B]: Schedule JMM-4

Column (C): Column (A) + Column (B)

SUMMARY OF ORIGINAL COST RATE BASE ADJUSTMENTS

| LINE NO. | ACCT. NO. | DESCRIPTION | (A) COMPANY AS FILED | (B) ADJ #1 Post-Test Year Plant Ref: Sch JMM-5 | (C) ADJ #2 Retirement of Transportation Vehicles Ref: Sch JMM-6 | (D) ADJ #3 Customer Deposits Ref: Sch JMM-7 | (E) ADJ #4 Removal of CAP Deferral Ref: Sch JMM-8 | (F) ADJ #5 Removal of 24 Months AFUDC and Dep. Expense Ref: Sch JMM-9 | (G) ADJ #6 Cash Working Capital Allowance Ref: Sch JMM-10 | (H) RUCO ADJUSTED |
|----------|-----------|---|-------------------------|---|--|--|--|--|--|----------------------|
| 1 | 301 | Organization Cost | - | - | - | - | - | - | - | - |
| 2 | 302 | Franchise Cost | - | - | - | - | - | - | - | - |
| 3 | 303 | Land and Land Rights | 1,554,591 | - | - | - | - | - | - | 1,554,591 |
| 4 | 304 | Structures and Improvements | 1,779,391 | - | - | - | - | - | - | 1,779,391 |
| 5 | 305 | Collecting and Impounding Res. | 1,019,211 | - | - | - | - | - | - | 1,019,211 |
| 6 | 306 | Lake River and Other Intakes | - | - | - | - | - | - | - | - |
| 7 | 307 | Wells and Springs | - | - | - | - | - | - | - | - |
| 8 | 308 | Infiltration Galleries and Tunnels | 159,627 | - | - | - | - | - | - | 159,627 |
| 9 | 309 | Supply Mains | - | - | - | - | - | - | - | - |
| 10 | 310 | Power Generation Equipment | 2,201,526 | - | - | - | - | - | - | 2,201,526 |
| 11 | 311 | Electric Pumping Equipment | 5,926,668 | - | - | - | - | - | - | 5,926,668 |
| 12 | 312 | Water Treatment Plant | - | - | - | - | - | - | - | - |
| 13 | 320.1 | Water Treatment Plant | 6,551,094 | - | - | - | - | - | - | 6,551,094 |
| 14 | 320.2 | Water Treatment Plant | 4,989,253 | - | - | - | - | - | - | 4,989,253 |
| 15 | 330.1 | Distribution Reservoirs and Standpipes | 24,390,732 | - | - | - | - | - | - | 24,390,732 |
| 16 | 331 | Transmission and Distribution Mains | 10,890,767 | - | - | - | - | - | - | 10,890,767 |
| 17 | 333 | Services | 2,916,068 | - | - | - | - | - | - | 2,916,068 |
| 18 | 334 | Meters | 2,019,913 | - | - | - | - | - | - | 2,019,913 |
| 19 | 335 | Hydrants | - | - | - | - | - | - | - | - |
| 20 | 336 | Backflow Prevention Devices | - | - | - | - | - | - | - | - |
| 21 | 339 | Other Plant and Miscellaneous Equipment | 143,521 | - | - | - | - | - | - | 143,521 |
| 22 | 340 | Office Furniture and Fixtures | 305,068 | - | - | - | - | - | - | 305,068 |
| 23 | 340.1 | Computer and Software | - | - | - | - | - | - | - | - |
| 24 | 341 | Transportation Equipment | 494,662 | - | - | - | - | - | - | 494,662 |
| 25 | 342 | Stores Equipment | - | - | - | - | - | - | - | - |
| 26 | 343 | Tools and Work Equipment | 190,662 | - | - | - | - | - | - | 190,662 |
| 27 | 344 | Laboratory Equipment | - | - | - | - | - | - | - | - |
| 28 | 345 | Power Operated Equipment | - | - | - | - | - | - | - | - |
| 29 | 346 | Communications Equipment | - | - | - | - | - | - | - | - |
| 30 | 347 | Miscellaneous Equipment | 43,326 | - | - | - | - | - | - | 43,326 |
| 31 | 348 | Other Tangible Plant | - | - | - | - | - | - | - | - |
| 32 | | Total Plant in Service - Sub Total | 41,221 | - | - | - | - | - | - | 41,221 |
| 33 | | | 65,617,301 | - | - | - | - | - | - | 65,617,301 |
| 34 | | Post-Test Year Plant | - | - | - | - | - | - | - | - |
| 35 | 307 | Wells and Springs | 793,374 | 276,206 | - | - | - | - | - | 1,069,580 |
| 36 | 311 | Electric Pumping Equipment | 130,000 | (130,000) | - | - | - | - | - | - |
| 37 | 320.2 | Water Treatment Equipment | 409,369 | (336,334) | - | - | - | - | - | 73,035 |
| 38 | 330.1 | Distribution Reservoirs and Standpipes | 1,245,860 | (975,439) | - | - | - | - | - | 270,421 |
| 39 | 331 | Transmission and Distribution Mains | 353,577 | (286,613) | - | - | - | - | - | 66,964 |
| 40 | 333 | Services | 410,000 | (410,000) | - | - | - | - | - | - |
| 41 | 334 | Meters | 300,000 | (300,000) | - | - | - | - | - | - |
| 42 | 335 | Hydrants | 10,000 | (10,000) | - | - | - | - | - | - |
| 43 | 339 | Other Plant and Miscellaneous Equipment | 132,558 | 86,874 | - | - | - | - | - | 219,432 |
| 44 | 341 | Transportation Equipment | 9,248 | 389 | - | - | - | - | - | 9,637 |
| 45 | 343 | Tools and Work Equipment | 31,777 | 5,158 | - | - | - | - | - | 36,935 |
| 46 | 346 | Communications Equipment | 59,000 | (13,649) | - | - | - | - | - | 45,351 |
| 33 | | Total Post Test Year Plant | 3,884,763 | (1,693,408) | - | - | - | - | - | 2,191,355 |
| 34 | | Total Plant in Service | \$ 69,502,064 | \$ (1,693,408) | \$ (77,348) | \$ - | \$ - | \$ - | \$ - | \$ 67,731,308 |
| 35 | | Less: Accumulated Depreciation | 25,734,123 | 38,609 | (77,348) | - | - | - | - | 25,695,384 |
| 36 | | Net Plant in Service | \$ 43,767,940 | \$ (1,732,017) | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 42,035,924 |
| 37 | | | - | - | - | - | - | - | - | - |
| 38 | | LESS: | - | - | - | - | - | - | - | - |
| 39 | | Contributions in Aid of Construction (CIAC) | - | - | - | - | - | - | - | - |
| 40 | | Less: Accumulated Amortization | - | - | - | - | - | - | - | - |
| 41 | | Net CIAC (L25 - L26) | \$ 14,991,871 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 14,991,871 |
| 42 | | Advances in Aid of Construction (AIAC) | 2,529,950 | - | - | - | - | - | - | 2,529,950 |
| 43 | | Customer Meter Deposits | 12,461,921 | - | - | - | - | - | - | 12,461,921 |
| 44 | | Customer Meter Deposits | 4,008,916 | - | - | - | - | - | - | 4,008,916 |
| 45 | | Deferred Income Taxes & Credits | 1,950 | - | - | - | - | - | - | 1,950 |
| 46 | | FHSD Settlement | 1,271,696 | - | - | - | - | - | - | 1,271,696 |
| 47 | | | 449,580 | - | - | - | - | - | - | 449,580 |
| 48 | | ADD: | - | - | - | - | - | - | - | - |
| 49 | | Deferred Debits | 666,104 | - | - | - | - | - | - | 666,104 |
| 50 | | Working Capital Allowance | 1,009,341 | - | - | - | - | - | - | 1,009,341 |
| 51 | | | - | - | - | - | - | - | - | - |
| 52 | | Original Cost Rate Base | \$ 27,269,321 | \$ (1,732,017) | \$ - | \$ (3,791) | \$ (78,206) | \$ (607,898) | \$ (84,917) | \$ 24,762,495 |
| 53 | | | - | - | - | - | - | - | - | - |

RATE BASE ADJUSTMENT NO. 4 - POST-TEST YEAR PLANT AND ACCUMULATED DEPRECIATION

| LINE NO. | ACCT NO. | DESCRIPTION | [A] COMPANY PROPOSED | [B] RUCO ADJUSTMENTS | [C] RUCO ¹ RECOMMENDED |
|----------|---|---|-------------------------|----------------------------|--------------------------------------|
| 1 | 307 | Wells and Springs | \$ 793,374 | \$ 276,206 | \$ 1,069,580 |
| 2 | 311 | Electric Pumping Equipment | 130,000 | (130,000) | - |
| 3 | 320.2 | Water Treatment Equipment | 409,369 | (336,334) | 73,035 |
| 4 | 330.1 | Distribution Reservoirs and Standpipes | 1,245,860 | (575,439) | 670,421 |
| 5 | 331 | Transmission and Distribution Mains | 353,577 | (286,613) | 66,964 |
| 6 | 333 | Services | 410,000 | (410,000) | - |
| 7 | 334 | Meters | 300,000 | (300,000) | - |
| 8 | 335 | Hydrants | 10,000 | (10,000) | - |
| 9 | 339 | Other Plant and Miscellaneous Equipment | 132,558 | 86,874 | 219,432 |
| 10 | 341 | Transportation Equipment | 9,248 | 389 | 9,637 |
| 11 | 343 | Tools and Work Equipment | 31,777 | 5,158 | 36,935 |
| 12 | 346 | Communications Equipment | 59,000 | (13,649) | 45,351 |
| 13 | Total Test Year Plant | | \$ 3,884,763 | \$ (1,693,408) | \$ 2,191,355 |
| 14 | | | | | |
| 15 | Accumulated Depreciation 1/2 Convention on Post-Test Year Plant | | \$ - | \$ 38,609 | \$ 38,609 |
| 16 | | | | | |
| 17 | | | | | |
| 18 | RUCO's Calculation of Post-Test Year Accumulated Depreciation | | RUCO Recommended | 1/2 Year Depreciation Rate | Accumulated Depreciaton |
| 19 | 307 | Wells and Springs | \$ 1,069,580 | 1.67% | 17,809 |
| 20 | 311 | Electric Pumping Equipment | - | 6.25% | - |
| 21 | 320.2 | Water Treatment Equipment | 73,035 | 1.67% | 1,216 |
| 22 | 330.1 | Distribution Reservoirs and Standpipes | 670,421 | 1.11% | 7,442 |
| 23 | 331 | Transmission and Distribution Mains | 66,964 | 1.00% | 670 |
| 24 | 333 | Services | - | 1.67% | - |
| 25 | 334 | Meters | - | 1.67% | - |
| 26 | 335 | Hydrants | - | 1.00% | - |
| 27 | 339 | Other Plant and Miscellaneous Equipment | 219,432 | 3.34% | 7,318 |
| 28 | 341 | Transportation Equipment | 9,637 | 10.00% | 964 |
| 29 | 343 | Tools and Work Equipment | 36,935 | 2.50% | 923 |
| 30 | 346 | Communications Equipment | 45,351 | 5.00% | 2,268 |
| | | | \$ 2,191,355 | | \$ 38,609 |

¹ Amounts may not reflect other adjustments.

REFERENCES:

Column [A]: Company Filing

Column [B]: Testimony JMM

Column [C]: Column [A] + Column [B]

Chaparral City Water Company
Docket No. W-02113A-13-0118
Test Year Ended: December 31, 2012

Schedule JMM-6

RATE BASE ADJUSTMENT NO. 2 - RETIREMENT OF TRANSPORTATION EQUIPMENT

| LINE NO. | ACCT NO. | DESCRIPTION | [A] | [B] | [C] |
|-------------|-------------|--------------------------|---------------------|---------------------|----------------------------------|
| | | | COMPANY PROPOSED | RUCO ADJUSTMENTS | RUCO ¹ RECOMMENDED |
| 1 | 341 | Transportation Equipment | \$ 494,662 | \$ (77,348) | \$ 417,314 |
| 2 | | Accumulated Depreciation | 25,734,123 | (77,348) | 25,656,775 |

¹ Amounts may not reflect other adjustments.

REFERENCES:

Column [A]: Company Filing

Column [B]: Testimony JMM

Column [C]: Column [A] + Column [B]

Chaparral City Water Company
Docket No. W-02113A-13-0118
Test Year Ended: December 31, 2012

Schedule JMM-7

RATE BASE ADJUSTMENT NO. 3 - CUSTOMER DEPOSITS

| LINE NO. | ACCT NO. | DESCRIPTION | [A] | [B] | [C] |
|-------------|-------------|-------------------|---------------------|---------------------|----------------------------------|
| | | | COMPANY PROPOSED | RUCO ADJUSTMENTS | RUCO ¹ RECOMMENDED |
| 1 | | Customer Deposits | \$ 1,950 | \$ 3,791 | \$ 5,741 |
| 2 | | | | | |

¹ Amounts may not reflect other adjustments.

REFERENCES:

Column [A]: Company Filing

Column [B]: Testimony JMM

Column [C]: Column [A] + Column [B]

Chaparral City Water Company
Docket No. W-02113A-13-0118
Test Year Ended: December 31, 2012

Schedule JMM-8

RATE BASE ADJUSTMENT NO. 4 - REMOVAL OF DEFERRED CENTRAL ARIZONA PROJECT ("CAP") MAINTENANCE AND INDUSTRIAL ("M&I") CHARGES

| LINE NO. | ACCT NO. | DESCRIPTION | [A] | [B] | [C] |
|-------------|-------------|-----------------|---------------------|---------------------|----------------------------------|
| | | | COMPANY PROPOSED | RUCO ADJUSTMENTS | RUCO ¹ RECOMMENDED |
| 1 | | Deferred Debits | \$ 686,104 | \$ (78,206) | 607,898 |

¹ Amounts may not reflect other adjustments.

REFERENCES:

Column [A]: Company Filing

Column [B]: Testimony JMM

Column [C]: Column [A] + Column [B]

RATE BASE ADJUSTMENT NO. 5 - REMOVAL OF 24 MONTH DEFERRAL OF ALLOWANCE FOR FUNDS USED DURING CONSTRUCTION ("AFUDC") AND DEPRECIATION EXPENSE

| LINE NO. | ACCT NO. | DESCRIPTION | [A] | [B] | [C] |
|-------------|-------------|-----------------|---------------------|---------------------|----------------------------------|
| | | | COMPANY PROPOSED | RUCO ADJUSTMENTS | RUCO ¹ RECOMMENDED |
| | | Deferred Debits | \$ 686,104 | \$ (607,898) | \$ 78,206 |

¹ Amounts may not reflect other adjustments.

REFERENCES:

Column [A]: Company Filing
Column [B]: Testimony JMM
Column [C]: Column [A] + Column [B]

RATE BASE ADJUSTMENT NO. 6 - CASH WORKING CAPITAL

| LINE NO. | ACCT NO. | DESCRIPTION | [A] | [B] | [C] |
|----------|----------|---------------------------|------------------|------------------|-------------------------------|
| | | | COMPANY PROPOSED | RUCO ADJUSTMENTS | RUCO ¹ RECOMMENDED |
| 1 | | Working Capital Allowance | \$ 1,009,341 | \$ (84,917) | 924,424 |

RUCO's Calculation

| | Proforma Test Year Amount | Revenue Lag (Lead) Days | Expense Lag (Lead) Days | Net Lag (Lead) Days Col. C - Col. D | Lead/Lag Factor Col. E/365 | Cash Working Capital Required Col. B * Col. F |
|---|---------------------------------|-------------------------------|-------------------------------|---|----------------------------------|---|
| (A) | (B) | (C) | (D) | (E) | (F) | (G) |
| OPERATING EXPENSES | | | | | | |
| Labor | 1,010,022 | 34.93 | 13.09 | 21.84 | 0.06 | 60,432 |
| Purchased Water | 1,166,827 | 34.93 | 43.67 | (8.74) | (0.02) | (27,943) |
| Fuel & Power | 613,386 | 34.93 | 27.86 | 7.07 | 0.02 | 11,879 |
| Chemicals | 120,742 | 34.93 | (79.22) | 114.15 | 0.31 | 37,760 |
| Waste Disposal & Other Utilities | 7,113 | 34.93 | 41.90 | (6.97) | (0.02) | (136) |
| Intercompany Support Services | 94,150 | 34.93 | 29.99 | 4.94 | 0.01 | 1,274 |
| Corporate Allocation | 361,175 | 34.93 | 30.00 | 4.93 | 0.01 | 4,877 |
| Outside Services | 508,106 | 34.93 | 88.00 | (53.07) | (0.15) | (73,879) |
| Group Insurance | 178,067 | 34.93 | 12.00 | 22.93 | 0.06 | 11,186 |
| Pensions | 85,086 | 34.93 | 67.98 | (33.05) | (0.09) | (7,705) |
| Regulatory Expense | - | - | - | - | - | - |
| Insurance Other Than Group | 73,025 | 34.93 | (26.14) | 61.07 | 0.17 | 12,218 |
| Customer Accounting (Less Bad Debt Expense) | 292,213 | 34.93 | 26.53 | 8.40 | 0.02 | 6,724 |
| Rents | 1,504 | 34.93 | - | 34.93 | 0.10 | 144 |
| General Office Expense | 164,179 | 34.93 | 39.69 | (4.76) | (0.01) | (2,142) |
| Miscellaneous | 151,474 | 34.93 | (3.22) | 38.15 | 0.10 | 15,832 |
| Maintenance Expense | 186,430 | 34.93 | 17.28 | 17.65 | 0.05 | 9,014 |
| TAXES | | | | | | |
| General Taxes-Property | 254,521 | 34.93 | 213.96 | (179.03) | (0.49) | (124,841) |
| General Taxes-Other | 86,320 | 34.93 | 3.03 | 31.90 | 0.09 | 7,544 |
| Income Tax | 567,404 | 34.93 | 37.00 | (2.07) | (0.01) | (3,220) |
| Interest Expense | 283,560 | 34.93 | 91.25 | (56.32) | (0.15) | (43,755) |
| TOTAL | 5,921,745 | | | | | (104,733) |
| CASH WORKING CAPITAL REQUIREMENT | | | | | | <u>(104,733)</u> |
| Company Recommended | | | | | | <u>(19,817)</u> |
| RUCO Adjustment | | | | | | <u>(84,917)</u> |

¹ Amounts may not reflect other adjustments.

REFERENCES:

Column [A]: Company Filing
Column [B]: Testimony JMM
Column [C]: Column [A] + Column [B]

OPERATING INCOME STATEMENT - ADJUSTED TEST YEAR AND RUCO RECOMMENDED

| LINE NO. | DESCRIPTION | [A] COMPANY ADJUSTED TEST YEAR AS FILED | [B] RUCO TEST YEAR ADJUSTMENTS | [C] RUCO TEST YEAR AS ADJUSTED | [D] RUCO PROPOSED CHANGES | [E] RUCO RECOMMENDED |
|----------|---------------------------------------|---|---|--|------------------------------------|----------------------------|
| 1 | <u>REVENUES:</u> | | | | | |
| 2 | Metered Water Sales | \$ 8,915,656 | \$ 65,960 | \$ 8,981,616 | \$ 1,636,808 | \$ 10,618,424 |
| 3 | Water Sales-Unmetered | - | - | - | - | - |
| 4 | Other Operating Revenue | 99,329 | - | 99,329 | - | 99,329 |
| 5 | Intentionally Left Blank | - | - | - | - | - |
| 6 | Total Operating Revenues | <u>\$ 9,014,985</u> | <u>\$ 65,960</u> | <u>\$ 9,080,945</u> | <u>\$ 1,636,808</u> | <u>\$ 10,717,753</u> |
| 7 | | | | | | |
| 8 | <u>OPERATING EXPENSES:</u> | | | | | |
| 9 | Salaries and Wages | \$ 1,024,112 | \$ (14,090) | \$ 1,010,022 | \$ - | \$ 1,010,022 |
| 10 | Purchased Water | 1,065,953 | 100,874 | 1,166,827 | - | 1,166,827 |
| 11 | Fuel & Power | 605,885 | 7,501 | 613,386 | - | 613,386 |
| 12 | Fuel for Power Production | - | - | - | - | - |
| 13 | Chemicals | 119,266 | 1,476 | 120,742 | - | 120,742 |
| 14 | Waste Disposal | 7,113 | - | 7,113 | - | 7,113 |
| 15 | Intercompany Support Services | 94,150 | - | 94,150 | - | 94,150 |
| 16 | Corporate Allocation | 500,330 | (139,155) | 361,175 | - | 361,175 |
| 17 | Outside Services | 508,106 | - | 508,106 | - | 508,106 |
| 18 | Group Insurance | 178,067 | - | 178,067 | - | 178,067 |
| 19 | Pensions | 85,086 | - | 85,086 | - | 85,086 |
| 20 | Regulatory Expense | 91,668 | - | 91,668 | - | 91,668 |
| 21 | Insurance Other Than Group | 73,025 | - | 73,025 | - | 73,025 |
| 22 | Customer Accounting | 318,959 | - | 318,959 | 14,568 | 333,527 |
| 23 | Rents | 1,504 | - | 1,504 | - | 1,504 |
| 24 | General Office Expense | 164,179 | - | 164,179 | - | 164,179 |
| 25 | Miscellaneous Expenses | 158,553 | (7,079) | 151,474 | - | 151,474 |
| 26 | Maintenance Expense | 388,614 | (202,184) | 186,430 | - | 186,430 |
| 27 | Depreciation and Amortization Expense | 2,014,048 | (121,036) | 1,893,012 | - | 1,893,012 |
| 28 | General Taxes - Property Taxes | 251,038 | (10,822) | 240,216 | 14,306 | 254,521 |
| 29 | General Taxes-Other | 86,320 | - | 86,320 | - | 86,320 |
| 30 | Income Taxes | 389,412 | 177,992 | 567,404 | 615,678 | 1,183,082 |
| 31 | Interest on Customer Deposits | - | - | - | - | - |
| 32 | Total Operating Expenses | <u>\$ 8,125,389</u> | <u>\$ (206,523)</u> | <u>\$ 7,918,865</u> | <u>\$ 644,552</u> | <u>\$ 8,563,416</u> |
| 33 | Operating Income (Loss) | <u>\$ 889,596</u> | <u>\$ 272,483</u> | <u>\$ 1,162,080</u> | <u>\$ 992,257</u> | <u>\$ 2,154,337</u> |

References:

Column (A): Company Schedule C-1
Column (B): Schedule JMM-12
Column (C): Column (A) + Column (B)
Column (D): Schedules JMM-20 and JMM-21
Column (E): Column (C) + Column (D)

OPERATING INCOME ADJUSTMENT NO. 1 - REVERSE DECLINING USAGE ADJUSTMENT

| LINE NO. | DESCRIPTION | [A] | [B] | [C] |
|----------|---------------------|------------------|------------------|-------------------------------|
| | | COMPANY PROPOSED | RUCO ADJUSTMENTS | RUCO ¹ RECOMMENDED |
| 1 | Metered Water Sales | \$ 8,915,656 | \$ 65,960 | \$ 8,981,616 |
| 2 | | | | |
| 3 | Purchased Water | \$ 1,065,953 | \$ 13,196 | \$ 1,079,149 |
| 4 | | | | |
| 5 | Fuel and Power | \$ 605,885 | \$ 7,501 | \$ 613,386 |
| 6 | | | | |
| 7 | Chemicals | \$ 119,266 | \$ 1,476 | \$ 120,742 |
| 8 | | | | |

¹ Amounts may not reflect other adjustments.

REFERENCES:

Column [A]: Company Filing

Column [B]: Testimony JMM

Column [C]: Column [A] + Column [B]

Chaparral City Water Company
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Schedule JMM-14

OPERATING INCOME ADJUSTMENT NO. 2 - INCENTIVE PAY

| LINE NO. | DESCRIPTION | [A] | [B] | [C] |
|-------------|--------------------|---------------------|---------------------|---------------------|
| | | COMPANY PROPOSED | RUCO ADJUSTMENTS | RUCO RECOMMENDED |
| 1 | Salaries and Wages | \$ 1,024,112 | \$ (14,090) | \$ 1,010,022 |

RUCO's Calculation of Incentive Pay

| | |
|---|------------------|
| Incentive pay included in labor expense | \$ 28,180 |
| Sharing between ratepayers and shareholders | 50.00% |
| Incentive pay | <u>\$ 14,090</u> |

REFERENCES:

Column [A]: Company Filing
Column [B]: Testimony JMM
Column [C]: Column [A] + Column [B]

OPERATING INCOME ADJUSTMENT NO. 3 - PURCHASED WATER EXPENSE

| LINE NO. | DESCRIPTION | [A] COMPANY PROPOSED | [B] RUCO ADJUSTMENTS | [C] RUCO ¹ RECOMMENDED |
|----------|-----------------|-------------------------|-------------------------|--------------------------------------|
| 1 | Purchased Water | \$ 1,065,953 | \$ 87,678 | \$ 1,153,631 |

RUCO's Calculation to Increase CAP M&I Charges

| | |
|---|--------------|
| Future CAP Charge 7,943.5 (a.f.) x \$20.80 (average of five years 20 + 21 + 21 + 21 + 21) | \$ 165,225 |
| Schedule CAP Allocation 6,861 (a.f.) x \$146.20 (average of five years 129 + 138 + 149 + 155 + 160) | 1,003,078 |
| Storage at MWD 917 (a.f.) *(\$16) | (14,672) |
| Projected CAP Costs | \$ 1,153,631 |
| Adjusted Test Year | \$ 1,065,953 |
| Recommended Adjustment | \$ 87,678 |

¹ Amounts may not reflect other adjustments.

REFERENCES:

Column [A]: Company Filing
Column [B]: Testimony JMM
Column [C]: Column [A] + Column [B]

OPERATING INCOME ADJUSTMENT NO. 4 - CORPORATE ALLOCATION EXPENSE

| LINE NO. | DESCRIPTION | [A] COMPANY PROPOSED | [B] RUCO ADJUSTMENTS | [C] RUCO ¹ RECOMMENDED |
|----------|---|----------------------------|----------------------------|---|
| 1 | Corporate Allocation | \$ 500,330 | \$ (139,155) | \$ 361,175 |
| 2 | | | | |
| 3 | <u>RUCO's Summary of Corporate Allocation Disallowances</u> | | | |
| 4 | At-Risk Compensation | \$ 86,489 | | |
| 5 | Corporate Communications | \$ 6,687 | | |
| 6 | Operational Communications | \$ 2,532 | | |
| 7 | EPCOR Community Essentials Council | \$ 5,595 | | |
| 8 | Community Relations | \$ 23,222 | | |
| 9 | Corporate Communications | \$ 14,630 | | |
| 10 | | <u>\$ 139,155</u> | | |

¹ Amounts may not reflect other adjustments.

REFERENCES:

Column [A]: Company Filing
Column [B]: Testimony JMM
Column [C]: Column [A] + Column [B]

Chaparral City Water Company
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Schedule JMM-17

OPERATING INCOME ADJUSTMENT NO. 5 - REMOVE CONSERVATION EXPENSE

| LINE NO. | DESCRIPTION | [A] | [B] | [C] |
|-------------|------------------------|---------------------|---------------------|----------------------------------|
| | | COMPANY PROPOSED | RUCO ADJUSTMENTS | RUCO ¹ RECOMMENDED |
| 1 | Miscellaneous Expenses | \$ 158,553 | \$ (7,079) | \$ 151,474 |

¹ Amounts may not reflect other adjustments.

REFERENCES:

Column [A]: Company Filing

Column [B]: Testimony JMM

Column [C]: Column [A] + Column [B]

Chaparral City Water Company
Docket No. W-02113A-13-0118
Test Year Ended: December 31, 2012

Schedule JMM-18

OPERATING INCOME ADJUSTMENT NO. 6 - REMOVE TANK MAINTENANCE EXPENSE

| LINE NO. | DESCRIPTION | [A] | [B] | [C] |
|-------------|---------------------|---------------------|---------------------|----------------------------------|
| | | COMPANY PROPOSED | RUCO ADJUSTMENTS | RUCO ¹ RECOMMENDED |
| 1 | Maintenance Expense | \$ 388,614 | \$ (202,184) | \$ 186,430 |

¹ Amounts may not reflect other adjustments.

REFERENCES:

Column [A]: Company Filing

Column [B]: Testimony JMM

Column [C]: Column [A] + Column [B]

OPERATING INCOME ADJUSTMENT NO. 7 - DEPRECIATION EXPENSE ON TEST YEAR PLANT

| LINE NO. | ACCT NO. | DESCRIPTION | (A) PLANT In SERVICE Per Staff | (B) NonDepreciable or Fully Depreciated PLANT | (C) DEPRECIABLE PLANT (Col A - Col B) | (D) DEPRECIATION RATE | (E) DEPRECIATION EXPENSE (Col C x Col D) |
|----------|----------|---|---|--|--|-----------------------------|---|
| 1 | 301 | Organization Cost | \$ - | \$ - | \$ - | 0.00% | \$ - |
| 2 | 302 | Franchise Cost | \$ - | \$ - | \$ - | 0.00% | \$ - |
| 3 | 303 | Land and Land Rights | \$ 1,554,591 | \$ 1,554,591 | \$ - | 0.00% | \$ - |
| 4 | 304 | Structures and Improvements | \$ 1,779,391 | \$ - | \$ 1,779,391 | 3.33% | \$ 59,254 |
| 5 | 305 | Collecting and Impounding Res. | \$ 1,019,211 | \$ - | \$ 1,019,211 | 2.50% | \$ 25,480 |
| 6 | 306 | Lake River and Other Intakes | \$ - | \$ - | \$ - | 2.50% | \$ - |
| 7 | 307 | Wells and Springs | \$ 159,627 | \$ - | \$ 159,627 | 3.33% | \$ 5,316 |
| 8 | 308 | Infiltration Galleries and Tunnels | \$ - | \$ - | \$ - | 6.67% | \$ - |
| 9 | 309 | Supply Mains | \$ 2,201,526 | \$ - | \$ 2,201,526 | 2.00% | \$ 44,031 |
| 10 | 310 | Power Generation Equipment | \$ - | \$ - | \$ - | 5.00% | \$ - |
| 11 | 311 | Electric Pumping Equipment | \$ 5,926,668 | \$ - | \$ 5,926,668 | 12.50% | \$ 740,834 |
| 12 | 320 | Water Treatment Plant | \$ - | \$ - | \$ - | 3.33% | \$ - |
| 13 | 320 | Water Treatment Equipment | \$ 6,551,094 | \$ - | \$ 6,551,094 | 3.33% | \$ 218,151 |
| 14 | 330 | Distribution Reservoirs and Standpipes | \$ 4,989,253 | \$ - | \$ 4,989,253 | 2.22% | \$ 110,761 |
| 15 | 331 | Transmission and Distribution Mains | \$ 24,390,732 | \$ - | \$ 24,390,732 | 2.00% | \$ 487,815 |
| 16 | 333 | Services | \$ 10,890,767 | \$ - | \$ 10,890,767 | 3.33% | \$ 362,663 |
| 17 | 334 | Meters | \$ 2,916,068 | \$ - | \$ 2,916,068 | 8.33% | \$ 242,908 |
| 18 | 335 | Hydrants | \$ 2,019,913 | \$ - | \$ 2,019,913 | 2.00% | \$ 40,398 |
| 19 | 336 | Backflow Prevention Devices | \$ - | \$ - | \$ - | 6.67% | \$ - |
| 20 | 339 | Other Plant and Miscellaneous Equipment | \$ 143,521 | \$ - | \$ 143,521 | 6.67% | \$ 9,573 |
| 21 | 340 | Office Furniture and Fixtures | \$ 305,068 | \$ - | \$ 305,068 | 6.67% | \$ 20,348 |
| 22 | 340.1 | Computer and Software | \$ - | \$ - | \$ - | 20.00% | \$ - |
| 23 | 341 | Transportation Equipment | \$ 417,314 | \$ - | \$ 417,314 | 20.00% | \$ 83,463 |
| 24 | 342 | Stores Equipment | \$ - | \$ - | \$ - | 4.00% | \$ - |
| 25 | 343 | Tools and Work Equipment | \$ 190,662 | \$ - | \$ 190,662 | 5.00% | \$ 9,533 |
| 26 | 344 | Laboratory Equipment | \$ - | \$ - | \$ - | 10.00% | \$ - |
| 27 | 345 | Power Operated Equipment | \$ - | \$ - | \$ - | 5.00% | \$ - |
| 28 | 346 | Communications Equipment | \$ 43,326 | \$ - | \$ 43,326 | 10.00% | \$ 4,333 |
| 29 | 347 | Miscellaneous Equipment | \$ - | \$ - | \$ - | 10.00% | \$ - |
| 30 | 348 | Other Tangible Plant | \$ 41,221 | \$ - | \$ 41,221 | 10.00% | \$ 4,122 |
| 31 | | Total Plant | \$ 65,539,953 | \$ 1,554,591 | \$ 63,985,362 | | \$ 2,468,982 |
| 32 | | | | | | | |
| 33 | | Post Test Year Plant | | | | | |
| 34 | 307 | Wells and Springs | \$ 1,069,580 | \$ - | \$ 1,069,580 | 3.33% | \$ 35,617 |
| 35 | 311 | Electric Pumping Equipment | \$ - | \$ - | \$ - | 12.50% | \$ - |
| 36 | 320.2 | Water Treatment Equipment | \$ 73,035 | \$ - | \$ 73,035 | 3.33% | \$ 2,432 |
| 37 | 330.1 | Distribution Reservoirs and Standpipes | \$ 670,421 | \$ - | \$ 670,421 | 2.22% | \$ 14,883 |
| 38 | 331 | Transmission and Distribution Mains | \$ 66,964 | \$ - | \$ 66,964 | 2.00% | \$ 1,339 |
| 39 | 333 | Services | \$ - | \$ - | \$ - | 3.33% | \$ - |
| 40 | 334 | Meters | \$ - | \$ - | \$ - | 3.33% | \$ - |
| 41 | 335 | Hydrants | \$ - | \$ - | \$ - | 2.00% | \$ - |
| 42 | 339 | Other Plant and Miscellaneous Equipment | \$ 219,432 | \$ - | \$ 219,432 | 6.67% | \$ 14,636 |
| 43 | 341 | Transportation Equipment | \$ 9,637 | \$ - | \$ 9,637 | 20.00% | \$ 1,927 |
| 44 | 343 | Tools and Work Equipment | \$ 36,935 | \$ - | \$ 36,935 | 5.00% | \$ 1,847 |
| 45 | 346 | Communications Equipment | \$ 45,351 | \$ - | \$ 45,351 | 10.00% | \$ 4,535 |
| 46 | | Total Post Test Year Plant | \$ 2,191,355 | \$ - | \$ 2,191,355 | | \$ 77,217 |
| 47 | | | | | | | |
| 48 | | Total | \$ 67,731,308 | \$ 1,554,591 | \$ 66,176,717 | | \$ 2,546,199 |
| 49 | | | | | | | |
| 50 | | Composite Depreciation Rate: | | | | | 3.85% |
| 51 | | Contributions in Aid of Construction ("CIAC"): | | | | | \$ 14,991,871 |
| 52 | | Amortization of CIAC: | | | | | \$ 577,187 |
| 53 | | | | | | | |
| 54 | | Depreciation Expense before Amortization of CIAC: | | | | | \$ 2,546,199 |
| 55 | | Less Amortization of CIAC: | | | | | \$ 577,187 |
| 56 | | Less FHSD Adjustment Amortization: | | | | | \$ 76,000 |
| 57 | | Test Year Depreciation Expense - RUCO | | | | | \$ 1,893,012 |
| 58 | | | | | | | |
| 59 | | Depreciation Expense - Company | | | | | \$ 2,014,048 |
| 60 | | | | | | | |
| 61 | | RUCO's Removal of Deferred CAP Charges | | | | | \$ (15,641) |
| 62 | | | | | | | |
| 63 | | RUCO's Removal of 24 month AFUDC and Depreciation Expense | | | | | \$ (23,586) |
| 64 | | | | | | | |
| 65 | | Adjusted Depreciation Expense | | | | | \$ 1,974,821 |
| 66 | | | | | | | |
| 67 | | RUCO's Adjustment to Depreciation Expense | | | | | \$ (81,809) |
| 68 | | | | | | | |
| 69 | | Total Adjustment (lines 61 + 63 + 69) | | | | | \$ (121,036) |
| 70 | | | | | | | |

References:

Column [A]: Schedule JMM-11
Column [B]: From Column [A]
Column [C]: Column [A] - Column [B]
Column [D]: Staff's Typical Engineering Depreciation Rates
Column [E]: Column [C] x Column [D]

Chaparral City Water Company
Docket No. W-02113A-13-0118
Test Year Ended: December 31, 2012

Schedule JMM-20

OPERATING INCOME ADJUSTMENT NO. 8 - PROPERTY TAX EXPENSE

| LINE NO. | Property Tax Calculation | [A] RUCO AS ADJUSTED | [B] RUCO RECOMMENDED |
|----------|---|----------------------------|----------------------------|
| 1 | RUCO Adjusted Test Year Revenues | \$ 9,080,945 | \$ 9,080,945 |
| 2 | Weight Factor | 2 | 2 |
| 3 | Subtotal (Line 1 * Line 2) | 18,161,890 | \$ 18,161,890 |
| 4 | RUCO Recommended Revenue, Per Schedule JMM-1 | 9,080,945 | \$ 10,717,753 |
| 5 | Subtotal (Line 4 + Line 5) | 27,242,835 | 28,879,643 |
| 6 | Number of Years | 3 | 3 |
| 7 | Three Year Average (Line 5 / Line 6) | 9,080,945 | \$ 9,626,548 |
| 8 | Department of Revenue Multiplier | 2 | 2 |
| 9 | Revenue Base Value (Line 7 * Line 8) | 18,161,890 | \$ 19,253,096 |
| 10 | Plus: 10% of CWIP - | 161,294 | 161,294 |
| 11 | Less: Net Book Value of Licensed Vehicles | - | \$ - |
| 12 | Full Cash Value (Line 9 + Line 10 - Line 11) | 18,323,184 | \$ 19,414,390 |
| 13 | Assessment Ratio | 19.0% | 19.0% |
| 14 | Assessment Value (Line 12 * Line 13) | 3,481,405 | \$ 3,688,734 |
| 15 | Composite Property Tax Rate (Per Company Schedule) | 6.9000% | 6.9000% |
| 16 | | | \$ - |
| 17 | RUCO Test Year Adjusted Property Tax (Line 14 * Line 15) | \$ 240,216 | |
| 18 | Company Proposed Property Tax | 251,038 | |
| 19 | | | |
| 20 | RUCO Test Year Adjustment (Line 16-Line 17) | \$ (10,822) | |
| 21 | Property Tax - RUCO Recommended Revenue (Line 14 * Line 15) | | \$ 254,521 |
| 22 | RUCO Test Year Adjusted Property Tax Expense (Line 16) | | \$ 240,216 |
| 23 | Increase in Property Tax Expense Due to Increase in Revenue Requirement | | \$ 14,306 |
| 24 | | | |
| 25 | Increase to Property Tax Expense | | \$ 14,306 |
| 26 | Increase in Revenue Requirement | | 1,636,808 |
| 27 | Increase to Property Tax per Dollar Increase in Revenue (Line 19/Line 20) | | 0.873996% |

REFERENCES:

Column [A]: Company Filing
Column [B]: Testimony JMM
Column [C]: Column [A] + Column [B]

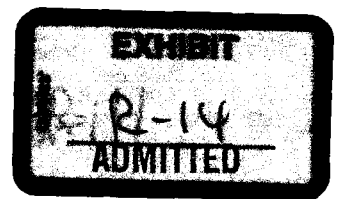
OPERATING INCOME ADJUSTMENT NO. 9 - TEST YEAR INCOME TAXES

| LINE NO. | DESCRIPTION | |
|----------|--|---------------|
| 1 | | |
| 2 | | |
| 3 | | |
| 4 | <u>Calculation of Income Tax:</u> | Test Year |
| 5 | Revenue (Schedule JMM-1) | \$ 9,080,945 |
| 6 | Operating Expenses Excluding Income Taxes | \$ 7,351,461 |
| 7 | Synchronized Interest (L17) | \$ 247,625 |
| 8 | Arizona Taxable Income (L1 - L2 - L3) | \$ 1,481,860 |
| 9 | Arizona State Income Tax Rate | 6.5000% |
| 10 | Arizona Income Tax (L4 x L5) | \$ 96,321 |
| 11 | Federal Taxable Income (L4 - L6) | \$ 1,385,539 |
| 12 | Federal Tax on First Income Bracket (\$1 - \$50,000) @ 15% | \$ 7,500 |
| 13 | Federal Tax on Second Income Bracket (\$51,001 - \$75,000) @ 25% | \$ 6,250 |
| 14 | Federal Tax on Third Income Bracket (\$75,001 - \$100,000) @ 34% | \$ 8,500 |
| 15 | Federal Tax on Fourth Income Bracket (\$100,001 - \$335,000) @ 39% | \$ 91,650 |
| 16 | Federal Tax on Fifth Income Bracket (\$335,001 - \$10,000,000) @ 34% | \$ 357,183 |
| 17 | Total Federal Income Tax | \$ 471,083 |
| 18 | Combined Federal and State Income Tax (L44 + L51) | \$ 567,404 |
| 19 | | |
| 20 | | |
| 21 | <u>Calculation of Interest Synchronization:</u> | |
| 22 | Rate Base (Schedule JMM-4) | \$ 24,762,495 |
| 23 | Weighted Average Cost of Debt | 1.10% |
| 24 | Synchronized Interest (L16 x L17) | \$ 272,387 |
| 25 | | |
| 26 | | |
| 27 | Income Tax - Per RUCO | \$ 567,404 |
| 28 | Income Tax - Per Company | \$ 389,412 |
| 29 | RUCO Adjustment | \$ 177,992 |

REFERENCES:

Column [A]: Company Filing
Column [B]: Testimony JMM
Column [C]: Column [A] + Column [B]

BEFORE THE ARIZONA CORPORATION COMMISSION



BOB STUMP
Chairman
GARY PIERCE
Commissioner
BRENDA BURNS
Commissioner
BOB BURNS
Commissioner
SUSAN BITTER SMITH
Commissioner

IN THE MATTER OF THE APPLICATION OF) DOCKET NO. W-02113A-13-0118
CHAPARRAL CITY WATER COMPANY FOR)
A DETERMINATION OF THE FAIR VALUE OF)
ITS UTILITY PLANT AND PROPERTY AND)
FOR INCREASES IN ITS RATES AND)
CHARGES BASED THEREON.)
_____)

(RATE DESIGN)

DIRECT

TESTIMONY OF

JEFFREY M. MICHLIK

PUBLIC UTILITIES ANALYST V

RESIDENTIAL UTILITY CONSUMER OFFICE

DECEMBER 19, 2013

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| II. BACKGROUND..... | 1 |
| III. RATE DESIGN..... | 2 |

SCHEDULES

Rate Design JMM-1
Typical Residential Bill Analysis..... JMM-2

**EXECUTIVE SUMMARY
CHAPARRAL CITY WATER COMPANY
DOCKET NO. W-02113A-13-0118**

Chaparral City Water Company ("CCWC" or the "Company") is an Arizona "C" Corporation. On February 1, 2012, EPCOR Water (USA) Inc. ("EWUS") acquired CCWC from American States Water Company. The Company currently serves residents in the Fountain Hills area; its principal place of business is 12021 N. Panorama Drive, Fountain Hills, Arizona. The Company is engaged in the business of providing water utility services in its certificated area in Maricopa County, Arizona. The Company served approximately 13,730 customers during the test year ended December 31, 2012.¹ The Company's current rates were approved in Decision No. 71308, dated December 21, 2009.

RUCO recommends approval of its rate design for Chaparral City Water Company.

The Company-proposed rates would increase the monthly bill for a typical 3/4-inch meter residential customer, with an average usage of 7,870 gallons, by \$13.18 percent or 34.81 percent, from \$37.85 to \$51.02. Under the RUCO-recommended rate design for permanent rates, the monthly bill for a typical residential customer would increase by \$6.60 or 17.44 percent, from \$37.85 to \$44.45.

¹ Based on the Company's 2012 annual report.

1 **I. INTRODUCTION**

2 **Q. Please state your name, title, and business address.**

3 A. My name is Jeffrey M. Michlik. I am a Public Utilities Analyst V employed by the
4 Arizona Residential Utility Consumer Office ("RUCO"). My business address is
5 1110 West Washington Street, Suite 220, Phoenix, Arizona 85007.

6
7 **Q. Are you the same Jeffrey M. Michlik who has filed testimony pertaining to**
8 **rate base, operating income, and revenue requirement on behalf of RUCO in**
9 **this docket for Chaparral City Water Company's permanent rate**
10 **application?**

11 A. Yes.

12
13 **II. BACKGROUND**

14 **Q. Please describe the Company and background of the current rate case.**

15 A. Chaparral City Water Company ("CCWC" or the "Company") is an Arizona "C"
16 Corporation. On February 1, 2012, EPCOR Water (USA) Inc. ("EWUS") acquired
17 CCWC from American States Water Company. The Company currently serves
18 residents in the Fountain Hills area; its principal place of business is 12021 N.
19 Panorama Drive, Fountain Hills, Arizona. The Company is engaged in the
20 business of providing water utility services in its certificated area in Maricopa
21 County, Arizona. The Company served approximately 13,730 customers during
22 the test year ended December 31, 2012.² The Company's current rates were
23 approved in Decision No. 71308, dated December 21, 2009.

24
25 **Q. Please briefly describe the current rate design structure?**

² Based on the Company's 2012 annual report.

1 A. The present rate design is based on monthly minimum charges that increase by
2 meter size and tiered commodity rate charges per one-thousand gallons
3 consumed. There are currently several customer classifications; residential,
4 commercial, irrigation, hydrants, fire sprinklers, and low income.

5
6 Only the 3/4-inch residential customer has a three-tier commodity rate design. All
7 other residential customers and commercial customers have a two-tier commodity
8 rate design. The irrigation and hydrant customers have a single-tier commodity
9 rate design. The Company does not propose changes to its break-over points or
10 current rate design structure.

11
12 **Q. Is RUCO recommending changes to the current rate design structure or**
13 **break-over points, in its rate design?**

14 A. No.

15
16 **III. RATE DESIGN**

17 **Q. Have you prepared schedules summarizing the present, Company-**
18 **proposed, and RUCO-recommended rates and charges?**

19 A. Yes. RUCO has presented its recommended rates in the attached Rate Design
20 Schedule JMM-1. A brief summary of the present, Company-proposed, and
21 RUCO-recommended rates for the 3/4-inch residential customer is presented
22 below.

23
24 **Q. Would you please summarize the present rate design for the 3/4-inch**
25 **residential customer?**

1 A. The present monthly minimum charge for a 3/4-inch residential customer is
2 \$16.50. No gallons are included in the monthly minimum charge. The residential
3 water commodity rate for the 3/4-inch residential customer is \$2.3100 per
4 thousand gallons for 1 to 3,000 gallons, \$2.9600 per thousand gallons for 3,001 to
5 9,000 gallons, and \$3.6100 per thousand gallons for any consumption over 9,000
6 gallons.

7
8 **Q. Would you please summarize the Company's proposed rate design for the**
9 **3/4-inch residential customer?**

10 A. The Company-proposed monthly minimum charge for a 3/4-inch residential
11 customer is \$22.30. No gallons are included in the monthly minimum charge. The
12 residential water commodity rate for the 3/4-inch residential customer is \$3.1061
13 per thousand gallons for 1 to 3,000 gallons, \$3.9850 per thousand gallons for
14 3,001 to 9,000 gallons, and \$4.8640 per thousand gallons for any consumption
15 over 9,000 gallons.

16
17 **Q. Would you please summarize RUCO's recommended rate design for the 3/4-**
18 **inch residential customer?**

19 A. RUCO recommends a monthly minimum charge for a 3/4-inch residential
20 customer of \$19.50. No gallons are included in the monthly minimum charge.
21 RUCO recommends the residential water commodity rate for the 3/4-inch
22 residential customer of \$2.6500 per thousand gallons for 1 to 3,000 gallons,
23 \$3.4900 per thousand gallons for 3,001 to 9,000 gallons, and \$4.2800 per
24 thousand gallons for any consumption over 9,000 gallons.

1 **Q. What is the rate impact on a typical 3/4-inch meter residential customer?**

2 A. The Company-proposed rates would increase the monthly bill for a typical 3/4-
3 inch meter residential customer, with an average usage of 7,870 gallons, by
4 \$13.18 percent or 34.81 percent, from \$37.85 to \$51.02. Under the RUCO-
5 recommended rate design for permanent rates, the monthly bill for a typical
6 residential customer would increase by \$6.60 or 17.44 percent, from \$37.85 to
7 \$44.45.

8

9 A typical bill analysis is provided on Rate Design Schedule JMM-2.

10

11 **Q. Does this conclude your rate design direct testimony?**

12 A. Yes, it does.

| Monthly Usage Charge | Present | Company Proposed Rates | RUCO Recommended Rates |
|--|-----------|---------------------------|---------------------------|
| <u>Meter Size (All Classes):</u> | | | |
| Chaparral Residential 3/4 Inch | \$ 16.50 | \$ 22.30 | \$ 19.50 |
| Chaparral Residential 1 Inch | 27.50 | 37.19 | 32.53 |
| Chaparral Residential 1-1/2 Inch | 55.00 | 74.38 | 65.07 |
| Chaparral Residential 2 Inch | 88.00 | 119.00 | 104.11 |
| Chaparral Residentail 3 Inch | 176.00 | 238.00 | 208.21 |
| Chaparral Residentail 4 Inch | 275.00 | 371.88 | 325.33 |
| Chaparral Residentail 6 Inch | 550.00 | 743.77 | 650.67 |
| Chaparral Residentail 8 Inch | 880.00 | 1,190.02 | 1,041.07 |
| Chaparral Residentail 10 Inch | 1,265.00 | 1,710.66 | 1,496.53 |
| Chaparral Residentail 12 Inch | 2,365.00 | 3,198.19 | 2,797.87 |
| Chaparral Commercial 3/4 Inch | 16.50 | 22.30 | 19.50 |
| Chaparral Commercial 1 Inch | 27.50 | 37.19 | 32.53 |
| Chaparral Commercial 1.5 Inch | 55.00 | 74.38 | 65.07 |
| Chaparral Commercial 2 Inch | 88.00 | 119.00 | 104.11 |
| Chaparral Commercial 3 Inch | 176.00 | 238.00 | 208.21 |
| Chaparral Commercial 4 Inch | 275.00 | 371.88 | 325.33 |
| Chaparral Commercial 6 Inch | 550.00 | 743.77 | 650.67 |
| Chaparral Commercial 8 Inch | 880.00 | 1,190.02 | 1,041.07 |
| Chaparral Commercial 10 Inch | 1,265.00 | 1,710.66 | 1,496.53 |
| Chaparral Commercial 12 Inch | 2,365.00 | 3,198.19 | 2,797.87 |
| Chaparral Irrigation 3/4 Inch | 16.50 | 22.30 | 19.50 |
| Chaparral Irrigation 1 Inch | 27.50 | 37.19 | 32.53 |
| Chaparral Irrigation 1.5 Inch | 55.00 | 74.38 | 65.07 |
| Chaparral Irrigation 2 Inch | 88.00 | 119.00 | 104.11 |
| Chaparral Irrigation 3 Inch | 176.00 | 238.00 | 208.21 |
| Chaparral Irrigation 4 Inch | 275.00 | 371.88 | 325.33 |
| Chaparral Irrigation 6 Inch | 550.00 | 743.77 | 650.67 |
| Chaparral Irrigation 8 Inch | 880.00 | 1,190.02 | 1,041.07 |
| Chaparral Irrigation 10 Inch | 1,265.00 | 1,710.66 | 1,496.53 |
| Chaparral Irrigation 12 Inch | 2,365.00 | 3,198.19 | 2,797.87 |
| Chaparral Hydrant 3/4 Inch | 16.50 | 22.30 | 19.50 |
| Chaparral Hydrant 1 Inch | 27.50 | 37.19 | 32.53 |
| Chaparral Hydrant 1.5 Inch | 55.00 | 74.38 | 65.07 |
| Chaparral Hydrant 2 Inch | 88.00 | 119.00 | 104.11 |
| Chaparral Hydrant 3 Inch | 176.00 | 238.00 | 208.21 |
| Chaparral Hydrant 4 Inch | 275.00 | 371.88 | 325.33 |
| Chaparral Hydrant 6 Inch | 550.00 | 743.77 | 650.67 |
| Chaparral Hydrant 8 Inch | 880.00 | 1,190.02 | 1,041.07 |
| Chaparral Hydrant 10 Inch | 1,265.00 | 1,710.66 | 1,496.53 |
| Chaparral Hydrant 12 Inch | 2,365.00 | 3,198.19 | 2,797.87 |
| Chaparral Fire Sprinklers (All Meter Sizes) | 10.0000 | 13.52 | 13.52 |
| Chaparral Low Income 3/4 Inch | N/A | 14.80 | 12.00 |
| Chaparral Low Income 1 Inch | N/A | 29.69 | 25.03 |
| <u>Commodity Charge - Per 1,000 Gallons</u> | | | |
| <u>3/4" Meter (Residential)</u> | | | |
| First 3,000 gallons | \$ 2.3100 | \$ 3.1061 | \$ 2.6500 |
| 3,001 to 9,000 gallons | 2.9600 | 3.9850 | 3.4900 |
| All gallons over 9,000 | 3.6100 | 4.8640 | 4.2800 |
| <u>3/4" Meter (Commerical)</u> | | | |
| First 9,000 gallons | 2.9600 | 3.9850 | 3.4900 |
| Over 9,000 gallons | 3.6100 | 4.8640 | 4.2800 |
| <u>1" Meter (Residential and Commercial)</u> | | | |
| First 24,000 gallons | 2.9600 | 3.9850 | 3.4900 |
| Over 24,000 gallons | 3.6100 | 4.8640 | 4.2800 |

Rate Design

| | | | |
|--|--------|--------|--------|
| <u>1.5" Meter (Residential and Commercial)</u> | | | |
| First 60,000 gallons | 2.9600 | 3.9850 | 3.4900 |
| Over 60,000 gallons | 3.6100 | 4.8640 | 4.2800 |
| <u>2" Meter (Residential and Commercial)</u> | | | |
| First 100,000 gallons | 2.9600 | 3.9850 | 3.4900 |
| Over 100,000 gallons | 3.6100 | 4.8640 | 4.2800 |
| <u>3" Meter (Residential and Commercial)</u> | | | |
| First 225,000 gallons | 2.9600 | 3.9850 | 3.4900 |
| Over 225,000 gallons | 3.6100 | 4.8640 | 4.2800 |
| <u>4" Meter (Residential and Commercial)</u> | | | |
| First 350,000 gallons | 2.9600 | 3.9850 | 3.4900 |
| Over 350,000 gallons | 3.6100 | 4.8640 | 4.2800 |
| <u>6" Meter (Residential and Commercial)</u> | | | |
| First 725,000 gallons | 2.9600 | 3.9850 | 3.4900 |
| Over 725,000 gallons | 3.6100 | 4.8640 | 4.2800 |
| <u>8" Meter (Residential and Commercial)</u> | | | |
| First 1,125,000 gallons | 2.9600 | 3.9850 | 3.4900 |
| Over 1,125,000 gallons | 3.6100 | 4.8640 | 4.2800 |
| <u>10" Meter (Residential and Commercial)</u> | | | |
| First 1,500,000 gallons | 2.9600 | 3.9850 | 3.4900 |
| Over 1,500,000 gallons | 3.6100 | 4.8640 | 4.2800 |
| <u>12" Meter (Residential and Commercial)</u> | | | |
| First 2,250,000 gallons | 2.9600 | 3.9850 | 3.4900 |
| Over 2,250,000 gallons | 3.6100 | 4.8640 | 4.2800 |
| <u>3/4" Meter (Irrigation and Hydrant)</u> | | | |
| All Usage | 2.9600 | 3.9850 | 3.4900 |
| <u>1" Meter (Irrigation and Hydrant)</u> | | | |
| All Usage | 2.9600 | 3.9850 | 3.4900 |
| <u>1.5" Meter (Irrigation and Hydrant)</u> | | | |
| All Usage | 2.9600 | 3.9850 | 3.4900 |
| <u>2" Meter (Irrigation and Hydrant)</u> | | | |
| All Usage | 2.9600 | 3.9850 | 3.4900 |
| <u>3" Meter (Irrigation and Hydrant)</u> | | | |
| All Usage | 2.9600 | 3.9850 | 3.4900 |
| <u>4" Meter (Irrigation and Hydrant)</u> | | | |
| All Usage | 2.9600 | 3.9850 | 3.4900 |
| <u>6" Meter (Irrigation and Hydrant)</u> | | | |
| All Usage | 2.9600 | 3.9850 | 3.4900 |
| <u>8" Meter (Irrigation and Hydrant)</u> | | | |
| All Usage | 2.9600 | 3.9850 | 3.4900 |
| <u>10" Meter (Irrigation and Hydrant)</u> | | | |
| All Usage | 2.9600 | 3.9850 | 3.4900 |
| <u>12" Meter (Irrigation and Hydrant)</u> | | | |
| All Usage | 2.9600 | 3.9850 | 3.4900 |
| Fire Sprinklers (All Meter Sizes) | 2.9600 | 3.9850 | 3.4900 |
| Standpipe Water Service - 2 Inch | 2.9600 | 3.9850 | 3.4900 |
| Low Income 3/4 Inch | 2.9600 | 3.9850 | 3.4900 |
| Low Income 3/4 Inch | 2.9600 | 3.9850 | 3.4900 |

Typical Bill Analysis
General Service 3/4-Inch Meter

| Company Proposed | Gallons | Present Rates | Proposed Rates | Dollar Increase | Percent Increase |
|------------------|---------|---------------|----------------|-----------------|------------------|
| Average Usage | 7,870 | \$ 37.85 | \$ 51.02 | \$ 13.18 | 34.81% |
| Median Usage | 12,000 | \$ 52.02 | \$ 70.12 | \$ 18.10 | 34.79% |

RUCO Recommended

| | | | | | |
|---------------|--------|----------|----------|---------|--------|
| Average Usage | 7,870 | \$ 37.85 | \$ 44.45 | \$ 6.60 | 17.44% |
| Median Usage | 12,000 | \$ 52.02 | \$ 61.23 | \$ 9.21 | 17.70% |

Present & Proposed Rates (Without Taxes)
General Service 3/4-Inch Meter

| Gallons Consumption | Present Rates | Company Proposed Rates | % Increase | RUCO Recommended Rates | % Increase |
|---------------------|---------------|------------------------|------------|------------------------|------------|
| - | \$ 16.50 | \$ 22.30 | 35.12% | \$ 19.50 | 18.18% |
| 1,000 | 18.81 | 25.40 | 35.04% | 22.15 | 17.76% |
| 2,000 | 21.12 | 28.51 | 34.98% | 24.80 | 17.42% |
| 3,000 | 23.43 | 31.61 | 34.93% | 27.45 | 17.16% |
| 4,000 | 26.39 | 35.60 | 34.89% | 30.94 | 17.24% |
| 5,000 | 29.35 | 39.58 | 34.87% | 34.43 | 17.31% |
| 6,000 | 32.31 | 43.57 | 34.85% | 37.92 | 17.36% |
| 7,000 | 35.27 | 47.55 | 34.83% | 41.41 | 17.41% |
| 8,000 | 38.23 | 51.54 | 34.81% | 44.90 | 17.45% |
| 9,000 | 41.19 | 55.52 | 34.80% | 48.39 | 17.48% |
| 10,000 | 44.80 | 60.39 | 34.79% | 52.67 | 17.57% |
| 11,000 | 48.41 | 65.25 | 34.79% | 56.95 | 17.64% |
| 12,000 | 52.02 | 70.12 | 34.79% | 61.23 | 17.70% |
| 13,000 | 55.63 | 74.98 | 34.78% | 65.51 | 17.76% |
| 14,000 | 59.24 | 79.84 | 34.78% | 69.79 | 17.81% |
| 15,000 | 62.85 | 84.71 | 34.78% | 74.07 | 17.85% |
| 16,000 | 66.46 | 89.57 | 34.78% | 78.35 | 17.89% |
| 17,000 | 70.07 | 94.44 | 34.77% | 82.63 | 17.92% |
| 18,000 | 73.68 | 99.30 | 34.77% | 86.91 | 17.96% |
| 19,000 | 77.29 | 104.16 | 34.77% | 91.19 | 17.98% |
| 20,000 | 80.90 | 109.03 | 34.77% | 95.47 | 18.01% |
| 25,000 | 98.95 | 133.35 | 34.76% | 116.87 | 18.11% |
| 30,000 | 117.00 | 157.67 | 34.76% | 138.27 | 18.18% |
| 35,000 | 135.05 | 181.99 | 34.76% | 159.67 | 18.23% |
| 40,000 | 153.10 | 206.31 | 34.75% | 181.07 | 18.27% |
| 45,000 | 171.15 | 230.63 | 34.75% | 202.47 | 18.30% |
| 50,000 | 189.20 | 254.95 | 34.75% | 223.87 | 18.32% |
| 75,000 | 279.45 | 376.55 | 34.75% | 330.87 | 18.40% |
| 100,000 | 369.70 | 498.15 | 34.74% | 437.87 | 18.44% |

CHAPARRAL CITY WATER COMPANY
DOCKET NO. W-02113A-13-0118



SURREBUTTAL TESTIMONY
OF
JEFFREY M. MICHLIK

ON BEHALF OF
THE
RESIDENTIAL UTILITY CONSUMER OFFICE

FEBRUARY 7, 2014

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EXECUTIVE SUMMARY - SURREBUTTAL

The Residential Utility Consumer Office ("RUCO") has reviewed Chaparral City Water Company's ("CCWC" or "Company") rebuttal testimony and has made several adjustments based on additional information provided by the Company. RUCO will address the Company's rebuttal issues for rate base, operating income, revenue requirement, and rate design testimonies.

The following are the Company's and RUCO's proposed rate base and adjusted operating income positions as filed in its direct, rebuttal, and surrebuttal testimonies.

Rate Base

| Company Direct | Company Rebuttal | RUCO Direct | RUCO Surrebuttal |
|----------------|------------------|--------------|------------------|
| \$27,269,321 | \$27,769,023 | \$24,762,495 | \$24,769,624 |

Adjusted Operating Income

| Company Direct | Company Rebuttal | RUCO Direct | RUCO Surrebuttal |
|----------------|------------------|-------------|------------------|
| \$889,596 | \$865,297 | \$1,162,080 | \$1,195,605 |

The following tables present the required gross revenue increase as filed by the Company and RUCO in their direct, rebuttal, and surrebuttal testimonies.

Required Dollar Increase in Gross Revenues

| Company Direct | Company Rebuttal | RUCO Direct | RUCO Surrebuttal |
|----------------|------------------|-------------|------------------|
| \$3,141,028 | \$3,089,039 | \$1,636,808 | \$1,288,039 |

Required Percentage Increase in Gross Revenues

| Company Direct | Company Rebuttal | RUCO Direct | RUCO Surrebuttal |
|----------------|------------------|-------------|------------------|
| 34.84% | 34.27% | 18.02% | 14.18% |

The Company is requesting a rate of return of 9.86 percent in its rebuttal testimony on its fair value rate base ("FVRB") of \$27,769,023. RUCO is proposing a rate of return of 7.98 percent on the FVRB of \$24,769,624.

Based on RUCO's analysis of the Company's rebuttal filing, RUCO is recommending an inverted three-tiered commodity charge for the 3/4-inch metered customer with monthly minimums based on meter size. The typical bill for 3/4-inch metered residential water customer that consumes an average of 7,870 gallons per month will experience an increase of \$5.15 from \$37.85 to \$42.99.

RUCO recommends that the Company use the group asset per account by vintage year methodology of depreciation on a going forward basis.

INTRODUCTION

Q. Please state your name for the record.

A. My name is Jeffrey M. Michlik.

Q. Have you previously filed testimony regarding this docket?

A. Yes, I have. I filed direct testimony in this docket on December 19, 2013.

Q. What is the purpose of your surrebuttal testimony?

A. My surrebuttal testimony will address the Company's rebuttal positions, proposals and comments pertaining to the adjustments RUCO recommended in direct testimony. In addition, my surrebuttal testimony will also include additional adjustments that RUCO is now recommending.

Q. What areas will you address in your surrebuttal testimony?

A. My surrebuttal testimony will address RUCO's recommended rate base, operating income, revenue requirement, and rate design.

Q. How is your surrebuttal testimony organized?

A. My surrebuttal testimony is presented in four sections. Section I addresses surrebuttal rate base adjustments. Section II addresses surrebuttal operating income adjustments. Section III rate design, and Section IV addresses other issues.

Q. Please identify the schedules that you are sponsoring in RUCO's surrebuttal testimony.

A. I am sponsoring surrebuttal schedules JMM-1 through JMM-25.

I. SURREBUTTAL RATE BASE ADJUSTMENTS

Q. Please summarize the number of rate base adjustments recommended by RUCO in its direct testimony, and recommended by RUCO in its surrebuttal testimony.

A. RUCO recommended six rate base adjustments in its direct testimony, RUCO is now recommending seven rate base adjustments in its surrebuttal testimony. Most of RUCO's rate base adjustments were discussed in RUCO's direct testimony, however, where appropriate RUCO has added new or additional information to address the rebuttal positions of the Company.

Q. Can you please identify the rate base adjustments along with the dollar amounts that RUCO is recommending?

A. Yes, please see the table below that summarizes RUCO's recommended rate base adjustments:

Rate Base Adjustments (Net)

Adjustment No. / Description

| | |
|--|----------------------|
| 1 – Post-Test Year Plant and Accumulated Depreciation | (\$1,732,017) |
| 2 – Retirement of Transportation Vehicles | -- 0 -- |
| 3 – Asset Retirement Obligation | (889) |
| 4 – Customer Meter Deposits | -- 0 -- |
| 5 – Removal of CAP Deferral | (78,206) |
| 6 – Removal of 24 months of AFUDC and Depreciation Expense | (607,898) |
| 7 – Cash Working Capital Allowance | <u>(80,690)</u> |
| RUCO Total Recommended Rate Base Adjustments | <u>(\$2,499,700)</u> |

1 See surrebuttal schedule JMM-4.

2
3 **Q. Are there any new rate base adjustments that RUCO recommends in**
4 **its surrebuttal testimony?**

5 A. Yes. As will be explained in RUCO rate base adjustment No. 3, RUCO has
6 removed the Company's Asset Retirement Obligation from rate base.

7
8 **Rate Base Adjustment No. 1 - Post-Test Year Plant and Accumulated**
9 **Depreciation**

10 **Q. Did you address RUCO's adjustment for Post-Test year plant and**
11 **accumulated depreciation in your direct testimony?**

12 A. Yes.

13
14 **Q. Do you have anything additional to add in your surrebuttal testimony?**

15 A. Just one. The Company has now included accumulated depreciation as a
16 component of post-test year plant.

17
18 **Rate Base Adjustment No. 2 – Retirement of Transportation Vehicles**

19 **Q. Did you address RUCO's retirement of Transportation Vehicles in your**
20 **direct testimony?**

21 A. Yes.

22
23 **Q. Do you have anything additional to add to your surrebuttal testimony?**

24 A. Yes, only that RUCO and the Company are now in agreement with this
25 adjustment.

Rate Base Adjustment No. 3 – Surrebuttal Adjustment to Remove Asset

Retirement Obligation (“ARO”)

Q. What is an Asset Retirement Obligation?

A. An asset retirement obligation (“ARO”) is a liability associated with the eventual retirement of a fixed asset, such as a legal requirement to return a site to its previous condition. According to the Company’s 2012 financial statements, this requirement relates to the Company’s retirement of some of its wells, which by law need to be properly capped before they are retired.

Q. Does the ARO arise from the Fountain Hills Sanitary District (“FHSD”) settlement?

A. Yes. In 2005, the Company entered into an agreement with FHSD whereby the Company agreed to permanently remove from service this well and in return the Company received a settlement of \$1,520,000 from FHSD.

Q. Is the Company trying to receive money from ratepayers again in this case through the ARO?

A. Yes.

Q. Why was this adjustment not discussed in your direct testimony?

A. The Company originally believed it had removed all the components of the ARO from rate base and was not seeking any recovery. This necessitated additional data requests to be asked of the Company.

1 **Q. What is RUCO's recommendation?**

2 A. RUCO recommends that \$5,252 in account 305 collecting and impounding
3 reservoirs, and \$4,364 in associated accumulated depreciation be
4 removed, as shown in surrebuttal schedule JMM-7.

5

6 **Rate Base Adjustment No. 4 – Customer Deposits**

7 **Q. Did you address RUCO's adjustment to customer deposits in your**
8 **direct testimony?**

9 A. Yes.

10

11 **Q. Do you have anything additional to add to your surrebuttal testimony?**

12 A. Yes. Based on new information submitted by the Company to RUCO, and
13 to lessen disputes between the parties RUCO has removed this adjustment.

14

15 **Rate Base Adjustment No. 5 – Removal of Deferred Central Arizona Project**
16 **("CAP") Maintenance and Industrial ("M&I") charges**

17 **Q. Did you address RUCO's removal of deferred CAP M&I charges in your**
18 **direct testimony?**

19 A. Yes.

20

21 **Q. Do you have anything additional to add in your surrebuttal testimony?**

22 A. Yes. Based on the Company's response to RUCO data request 8.05 in
23 which RUCO asked the Company to provide a listing of the CAP water
24 ordered and delivered in acre feet since. The Company provided the
25 following table:

26

CAP Water Ordered and Delivered in Acre Feet Per Year.

| Year | Ordered | Delivered |
|------|---------|-----------|
| 2013 | 6,861 | 5,343 |
| 2012 | 7,145 | 6,776 |
| 2011 | 6,830 | 6,430 |
| 2010 | 5,724 | 6,239 |
| 2009 | 7,129 | 6,586 |
| 2008 | 7,129 | 5,684 |
| 2007 | 7,845 | 7,080 |
| 2006 | 6,500 | 7,334 |

By reference of the table, only in years 2006 and 2007 did the actual CAP water delivery to the Company exceed its original 6,978 acre feet CAP allocation and break into the additional CAP allocation acquired in the last rate case of 1,931 acre feet.

Q. To clarify your direct testimony, did you say the Company would never be allowed to recover these deferred M&I costs?

A. No. RUCO recommended these cost continue to be deferred until at least 50 percent of the additional allocation is used and useful consistent with Decision No. 71308.

1 **Q. Did Staff state in its direct testimony, why it supported allowing a 60**
2 **month deferral of CAP M&I charges rather than the 48 months**
3 **authorized in Decision No. 71308?**

4 **A. No. They also never stated why they believed the additional CAP allocation**
5 **is now used and useful.**

6
7 **Rate Base Adjustment No. 6 – Removal of 24 Month Deferral of Allowance**
8 **for Funds Used During Construction (“AFUDC”) and Depreciation Expense**

9 **Q. Did you address RUCO’s removal of the Company’s proposed 24**
10 **month deferral of AFUDC and depreciation expense in your direct**
11 **testimony?**

12 **A. Yes.**

13
14 **Q. Do you have anything additional to add in your surrebuttal testimony?**

15 **A. Yes.**

16
17 **Q. Does RUCO agree that there is an upfront lag between rate cases when**
18 **new plant goes into service and is reclassified from construction work**
19 **in progress (AFUDC stops); and when the plant is rate based in the**
20 **Company’s next rate case?**

21 **A. Yes. However, the other side of the story that the Company is not telling is**
22 **that once the plant is rate based in a future rate case the balance swings**
23 **back to the Company’s favor. Since the Company uses the group method**
24 **of depreciation, once the plant is rate based the plant continues to earn a**
25 **return on and a return of investment until it is retired. Under the group**
26 **method of depreciation which the Company currently uses it is not**

1 uncommon for the plant to be over depreciated. In addition, it is not
2 uncommon for Companies to not properly retire plant, as was the situation
3 in the last rate case. Thus rate payers have overpaid through rates for
4 retired or fully depreciated plant. Further, once the plant is retired and is
5 sold ratepayers are not entitled to any of the profits. If the Company
6 seriously wants to have a conversation about deferring AFUDC costs it
7 should first adopt a vintage group depreciation methodology, as will be
8 discussed later.

9
10 **Rate Base Adjustment No. 7 – Cash Working Capital**

11 **Q. Did you address RUCO's adjustments to the Company's Lead/Lag**
12 **study in your direct testimony?**

13 **A. Yes.**

14
15 **Q. Do you have anything additional to add in your surrebuttal testimony?**

16 **A. Yes.** Only that as a result of operating adjustments made in surrebuttal
17 testimony the cash working capital amount has changed. RUCO is now
18 recommending a decrease of \$80,690.

19
20 **II. SURREBUTTAL OPERATING INCOME ADJUSTMENTS**

21 **Q. Please summarize the number of operating income adjustments**
22 **recommended by RUCO in its direct testimony, and recommended by**
23 **RUCO in its surrebuttal testimony?**

24 **A.** RUCO recommended nine operating income adjustments in its direct
25 testimony, and is now recommending ten operating income adjustments in
26 its surrebuttal testimony. Most of RUCO's operating adjustments were

1 discussed in RUCO's direct testimony, however, where appropriate RUCO
2 has added new or additional information to address the rebuttal positions of
3 the Company.

4
5 **Q. Can you please identify the operating income adjustments along with**
6 **the dollar amounts that RUCO is recommending?**

7 **A.** Yes, please see the table below that summarizes RUCO's recommended
8 operating income adjustments:

9 **Operating Income Adjustments (Net)**

10

11 **Adjustment No / Description**

| | | |
|----|---|------------------|
| 12 | 1 – Declining Usage Adjustment | \$43,787 |
| 13 | 2 – Surrebuttal Excess Water Loss Adjustment | 45,728 |
| 14 | 3 – Incentive Pay | 14,090 |
| 15 | 4 – Purchased Water Expense | (87,678) |
| 16 | 5 – Corporate Allocation Expense | 141,257 |
| 17 | 6 – Remove Conservation Expense | 7,079 |
| 18 | 7 – Tank Maintenance Expense | 202,184 |
| 19 | 8 – Depreciation Expense | 121,167 |
| 20 | 9 – Property Expense | 17,144 |
| 21 | 10 – Income Tax Expense | (198,750) |
| 22 | RUCO Total Recommended Operating Income adjustments | <u>\$306,008</u> |

23 See surrebuttal schedule JMM-13.

24

25

1 **Q. Are there any new operating income adjustments that RUCO**
2 **recommends in its surrebuttal testimony?**

3 A. Yes. As will be explained in RUCO operating income adjustment no. 2,
4 RUCO adopts a Staff recommended adjustment for excess water loss. In
5 addition, RUCO has made additional adjustments to the Company's
6 corporate allocations, in RUCO operating income adjustment no. 5.

7
8 **Operating Income Adjustment No. 1 – Reverse Declining Usage Adjustment**

9 **Q. Did you address RUCO's declining usage adjustment in your direct**
10 **testimony?**

11 A. Yes.

12
13 **Q. Do you have anything additional to add to your surrebuttal testimony?**

14 A. Yes.

15
16 **Q. Although RUCO is still opposed to a declining usage adjustment, if the**
17 **Commission were inclined to approve a declining usage adjustment**
18 **in this case, does RUCO agree with the Company's rebuttal position?**

19 A. Yes and No. Moving the compliance filing date from January 31st of each
20 year to March 30th of each year is acceptable to RUCO.

21
22 However, the Company's premise is residential tiered rates are causing
23 declining usage, and as a result the Company is not able to meet its revenue
24 requirement. It would be helpful to look at all customer classes not just the
25 residential classes, as proposed by the Company. By looking at all customer
26 classes, one can determine if the declining usage is only isolated to

1 residential customers or to all customer classes. The usage patterns of all
2 customer classes could then be reviewed between rate cases, and any
3 adjustments to rate design could be addressed in the Company's next rate
4 case.

5

6 **Operating Income Adjustment No. 2 – Surrebuttal Adjustment for Excess**
7 **Water Loss**

8 **Q. Please explain RUCO operating income adjustment no. 2?**

9 A. Based on the direct testimony of Staff witness Gerald W. Becker, RUCO is
10 in agreement with Staff that an adjustment for excess water loss is
11 warranted for the reason cited in Mr. Becker's testimony which was water
12 loss of 13.9 percent.

13

14 **Q. Was excess water loss also a problem in the Company's last rate**
15 **case?**

16 A. Yes. Staff's engineering witness in the prior case Mr. Marlin Scott, Jr. noted
17 a 15.9 percent water loss in his engineering report.¹

18

19 **Q. In the process of the Company doing its due diligence when**
20 **purchasing the Company from the prior owner, should the Company**
21 **have been aware of a potential water loss problem?**

22 A. Yes.

23

24

25

¹ See Direct Testimony of Staff Witness Marlin Scott, Jr., Chaparral City Water Company (Docket No. W-02113A-07-0551).

1 **Q. What is RUCO's surrebuttal recommendation?**

2 A. RUCO, recommends a reduction to purchased water expense of \$39,598,
3 fuel and power expense of \$20,746, and chemical expense of \$4,084, as
4 shown in RUCO surrebuttal schedule JMM-15.
5

6 **Operating Income Adjustment No. 3 – Incentive Pay**

7 **Q. Did you address RUCO incentive pay adjustment in your direct**
8 **testimony?**

9 A. Yes.
10

11 **Q. Do you have anything additional to add in your surrebuttal testimony?**

12 A. No.
13

14 **Operating Income Adjustment No. 4 – Purchased Water Expense**

15 **Q. Did you address RUCO's adjustment to purchased water expense in**
16 **your direct testimony?**

17 A. Yes.
18

19 **Q. Do you have anything additional to add in your surrebuttal testimony?**

20 A. Yes.
21

22 **Q. Did the Company provide a revised Central Arizona Project ("CAP")**
23 **2014 – 2015 rate schedule?**

24 A. Yes.
25

1 **Q. Does this CAP rate schedule projects rates out to 2018, as RUCO has**
2 **done?**

3 A. No, only to 2015.
4

5 **Q. Under RUCO's deferral of CAP charges does it matter if rates go up or**
6 **down?**

7 A. No, as stated in RUCO's direct testimony, any over-or-under collection will
8 be trued-up in the Company's next rate case.
9

10 **Q. Based on prior year CAP rate schedules do rates remain the same or**
11 **increase?**

12 A. Generally CAP rates remain the same or increase.
13

14 **Q. Has the Company criticized RUCO's methodology of projecting CAP**
15 **rates and providing the Company with more money in base rates?**

16 A. Yes. However, given that CAP rates increase or stay the same, and given
17 that RUCO recommends a CAP deferral to true-up charges in the
18 Company's next rate case, RUCO believes its deferral method is sound.
19

20 **Operating Income Adjustment No. 5 – Corporate Allocation Expense**

21 **Q. Did you address RUCO's corporate allocation expenses in your direct**
22 **testimony?**

23 A. Yes.
24

25 **Q. Do you have anything additional to add to your surrebuttal testimony?**

26 A. Yes.

1 **Q. In your direct testimony, you stated that RUCO had yet to receive**
2 **several outstanding data request in regards to corporate allocations.**
3 **Has RUCO finally received enough information from the outstanding**
4 **data requests to make additional recommendations?**

5 A. Yes. The Company in early January (2014) provided responses to RUCO's
6 outstanding data requests that were sent to the Company back on
7 November 4, 2013.

8
9 **Q. Did the delay necessitate additional data requests from RUCO, and as**
10 **a result, delay the timing of the audit work performed by RUCO?**

11 A. Yes.

12
13 **Q. Did the Company initially provide RUCO with all invoices over \$5,000?**

14 A. No. The Company wanted to provide only invoices over \$50,000. The
15 Company stated it would be too burdensome to scan an additional 100
16 invoices.

17
18 **Q. Is this troublesome in light of the Company's request for a System**
19 **Improvement Benefits Mechanism ("SIB") in this case?**

20 A. Yes. If the Commission grants a SIB, in this case, will the Company only
21 provide invoices to Staff and RUCO that are over \$50,000 or perhaps set a
22 higher threshold?

1 **Q. Who owns EPCOR?**

2 A. The City of Edmonton.
3

4 **Q. Where is the corporate headquarters located?**

5 A. At EPCOR Towers, 10423 101 Street NW, Edmonton, Alberta T5H OE8
6 (see Attachment A).
7

8 **Q. You mentioned in your direct testimony that RUCO recommended**
9 **removing all costs from the At-Risk Cost Pool and Public and**
10 **Governmental Affairs cost pool. What other corporate pools does the**
11 **corporate office allocate costs down to the Company?**

12 A. Executive and Executive Assistants
13 Strategic Planning and Development
14 Regulatory Affairs
15 Legal Services
16 Risk, Assurance & Advisory
17 Corporate Finance (some)
18 Information Services
19 Business Transformation
20 Supply Chain Management (some)
21 Treasury
22 Human Resources (some)
23 Health Safety and Environmental Services
24
25

1 **Q. From the corporate cost pool listing above, what additional corporate**
2 **allocation costs does RUCO recommend be disallowed?**

3 A. RUCO recommends an additional removal of corporate costs (e.g.
4 meal/entertainment, donations, promotions etc.) of \$276,272 at the
5 corporate level, which when allocated down to the Company level
6 represents a \$2,102 adjustment, as shown in schedule JMM-18.

7
8 **Q. In its rebuttal testimony did the Company remove some corporate**
9 **costs?**

10 A. Yes. Two invoices in the amount of \$211,065 to Rexall Sports Corp and
11 \$75,336 to Northlands, where removed by the Company (see Attachment
12 B).

13
14 **Q. What corporate category (cost pool) were the amounts removed from?**

15 A. The public and governmental community relations category.
16

17 **Q. Are RUCO and the Company in agreement that the public and**
18 **governmental community relations costs have nothing to do with the**
19 **day to day operations of the Company, and these costs should be**
20 **borne 100 percent by shareholders?**

21 A. Yes.
22
23
24
25

1 **Q. Does the Company still take exception to RUCO's removal of At-Risk**
2 **Cost Pool?**

3 A. Yes. Again, RUCO's position is the At-Risk Cost Pool has nothing to do
4 with the day to day operations of a water system, but more with Company
5 profits.
6

7 **Q. Are other cities concerned with EPCOR's incentive plans?**

8 A. Yes, see Attachment C. There is a hyper-link on the data request. The
9 information on the hyper-link has been provided after data request A-EWR-
10 02. In fact the preamble seems to suggest an EPCOR bonus scheme
11 primarily driven by profits.
12

13 **Q. Does RUCO have any general comment about shared service models?**

14 A. Yes. For years companies have continually claimed that ratepayers realize
15 greater benefits from a shared service model than would be realized on a
16 stand-alone basis. The verdict is still out on that claim. However, what is
17 apparent is the "catch me if you can" strategy of passing corporate costs
18 through to ratepayers. With EPCOR its hockey season tickets,
19 entertainment costs, and donations. With Liberty Utilities it was Super Bowl
20 tickets, Lear jets, entertainment costs, and donations.
21

22 **Q. Are you aware of other municipalities that have taken issue with**
23 **EPCOR's shared service model?**

24 A. Yes, please see Attachment D. In fact one city council has voted
25 unanimously to buy back its water system.
26

Operating Income Adjustment No. 6 – Conservation Expense

Q. Did you address RUCO's conservation expense adjustment in your Direct Testimony?

A. Yes.

Q. Do you have anything additional to add to your surrebuttal testimony?

A. No.

Operating Income Adjustment No. 7 – Tank Maintenance Expense

Q. Did you address RUCO's tank maintenance expense adjustment in your direct testimony?

A. Yes.

Q. In Company witness Mr. Stuck's rebuttal testimony, he states that RUCO has changed its position on tank maintenance expense, please comment.

A. Just a few caveats before I address Mr. Stuck's comments. First each case is unique and should be determined on a case by case basis. Second I was not the analyst working on the case for RUCO. Third, positions may change over time. That being said, I will now address Mr. Stuck's rebuttal comments.

Q. What two decisions does Mr. Stuck cite in his rebuttal testimony, as being supportive of the Company's tank maintenance program, and in which RUCO was supportive of in the past?

A. Mr. Stuck cites Decision No. 71410, and Decision No. 72047.

Decision No. 71410

Q. Is the tank maintenance program advocated by the Company in Decision No. 71410² the same or is it remotely similar to what the Company has proposed in this case?

A. No. The Company is not proposing a reserve for tank maintenance expense or deferral. Therefore there are no safeguards for ratepayers. At least In Decision No. 71410, the following was proposed:³

“The Company proposed a reserve for water tank maintenance expense which would provide an allowance for tank maintenance costs in operating expenses. Under the Company’s proposal, the funds collected through rates would be recorded in a deferred liability account labeled reserve for Tank Maintenance, and the Reserve for Tank Maintenance account would be charged as tank maintenance expenses are incurred, reducing the balance of funds reserved. The Company states that in subsequent rate cases, actual tank maintenance expenditures and the reserve account could be reviewed and the annual allowance increased, decreased or remain unchanged on a going forward basis as circumstances warrant, and that all revenue collected would be offset by actual expenditures made to maintain tanks, resulting in no over-collection or under-collection of tank maintenance expense.”

² Docket No. W-01303A-08-0227 ET AL.

³ See Decision No. 71410 page 36.

1 **Q. What is the risk for ratepayers if the Company is given a pro-forma**
2 **adjustment for tank painting maintenance in this case?**

3 A. The tank painting simply does not get done. The Company uses the money
4 to pay other expenses or pays dividends to its shareholders.
5

6 **Q. What is the second problem with the proposed tank maintenance**
7 **reserve discussed in Decision No. 71410?**

8 A. The second problem is the Commission rejected the Company's tank
9 maintenance reserve proposal.
10

11 "We are not opposed to the Company instituting a 14-year interior coating
12 and exterior painting program for its water tanks. However, we do not
13 believe that it is necessary or reasonable to adopt the Company's proposal
14 for advance funding of a Reserve for Tank Maintenance at this time.
15 Because the tank maintenance expense reserve account balance proposed
16 by the Company is not based on ***known and measurable*** Company
17 expenditures, we find the normalization of tank maintenance expenses
18 proposed by Staff, which is based on a three year average of expenses for
19 each district to be the more reasonable alternative. Staff's normalization
20 adjustment will therefore be adopted for each of the six water districts."
21
22
23
24
25
26

1 **Decision No. 72047**

2 **Q. Mr. Stuck also cites the following excerpt from Decision No. 72047,**
3 **"RUCO opposes the establishment of a tank maintenance expense**
4 **reserve fund, but did not object to the normalization adjustment**
5 **proposed by Staff." Please comment?**

6 A. RUCO has reviewed both the RUCO opening brief and reply brief, nowhere
7 in the briefs does RUCO advocate a tank maintenance normalization
8 adjustment. That being said, it is not uncommon for the hearing officer to
9 adopt a parties issue if it was not properly briefed. What is crystal clear is
10 RUCO's position in both its direct testimony, surrebuttal testimony, and
11 briefs, as will be discussed below.

12
13 **Q. Did RUCO support a tank maintenance reserve in Decision No.**
14 **72047?⁴**

15 A. No, RUCO opposed the reserve for Tank Maintenance in Decision No.
16 72047, based on Decision No. 71410 as pointed out by RUCO's consultant
17 in that case:⁵

18 *"The Company seeks to collect from ratepayers in advance for tank*
19 *maintenance. This Company request should be rejected because the tank*
20 *maintenance expense reserve account balance proposed by the Company*
21 *is not based on **known and measureable** Company expenditures and*
22 *therefore, not necessary or reasonable to adopt the Company's proposal*
23 *for advance funding of a Reserve for Tank Maintenance at this time. As*

⁴ Docket Nos. W-01303A-09-0343 and SW-01303A-09-0343.

⁵ See Direct Testimony of Ralph C. Smith, Docket Nos. W-01303A-09-0343 and SW-01303A-09-0343, page 65, line 16.

1 *noted above, a similar AAWC proposal was opposed by Staff and rejected*
2 *by the Commission in Decision No. 71410."*

3
4 Further,

5
6 *"AAWC's tank painting reserve for Sun City Water would have ratepayers*
7 *paying for tank painting before the money is expended on tank painting.*
8 *There is no need for ratepayers to pre-fund tank painting expense.*

9
10 *Additionally, with the large percentage rate increases being requested by*
11 *AAWC and the poor economy, this seems like a particularly bad time to start*
12 *forcing ratepayers to pre-pay for expenses that the utility has not yet*
13 *incurred. Establishing ratepayer pre-funding for a Reserve account also has*
14 *elements of single issue ratemaking. There is no compelling need to single*
15 *out tank painting expense for special ratemaking treatment. A normalized*
16 *allowance for tank painting expense can be reflected in rates based on an*
17 *average of recent actual experience through the test year, iif the test year*
18 *amount itself were to be viewed as being abnormal. Establishing a*
19 *Reserve, on the other hand, would remove incentives to control the expense*
20 *between rate cases, and would virtually guarantee dollar for dollar recovery*
21 *by the utility of such expenditures.*

22
23 *Moreover, there is not much, if any, difference in the Tank Maintenance*
24 *Reserve Fund Accrual that AAWC is requesting in the current rate case and*
25 *the one recently proposed by AAWC in its last rate case, which was rejected*
26 *by the Commission. The Commission recently rejected a similar proposal*

1 by AAWC in Docket Nos. W-O1303A-08-0227 et al. which would apparently
2 have applied for all of the water districts for which AAWC had sought rate
3 increases in that case.”⁶

4
5 “The Company’s request for a tank maintenance reserve fund for Sun City
6 Water in this case is basically the same as in the last case. The Commission
7 rejected the request in the earlier Decision and the Company has not
8 provided any new or different evidence which would persuade RUCO, or
9 this Commission for that matter, to deviate from the Commission’s decision
10 in the last case.”⁷

11
12 **Q. Do you have any other comments about Decision No. 72047?**

13 **A. Yes. Ironically, Mr. Stuck fails to cite the following:**

14
15 “The Company also requests authority to establish a deferral account to
16 allow it to defer tank maintenance expenses for the Anthem Water district
17 until the next rate case for the district, at which time the Company may seek
18 recovery of the deferred amounts. **RUCO does not oppose the**
19 **establishment of such a deferral account**, as the Company already has
20 such an account in place for the Sun City Water district. We agree with the
21 Company that establishment of such an account is appropriate, and find
22 that it is reasonable and in the public interest to authorize the Company to
23 establish a deferral account to allow it to defer tank maintenance expenses
24 for the Anthem Water district until the next rate case for the district, at which

⁶ See Surrebuttal Testimony of Ralph C. Smith, page 85 line 10.

⁷ See RUCO Reply Brief, page 9 line 19.

1 *time the Company may present evidence in support of recovery of the*
2 *deferred expense amounts for consideration."*

3

4 **Q. Does RUCO understand that tank recoating is an expensive process,**
5 **and the Company may get short changed between rate cases, and not**
6 **receive recovery of these expenses?**

7 **A. Of course, that is why RUCO is okay with the Company setting up a deferral**
8 **account in this case *consistent* with what was approved in Decision No.**
9 **72047.**

10

11 **Q. Do these Decision's support the Company's position as Company**
12 **witness Mr. Stuck claims?**

13 **A. No, However, they do support RUCO's position of *known and***
14 ***measureable* and are *consistent* with RUCO's position in this case.**

15

16 **Decision No. 74294**

17 **Q. Have there been any recent Commission decisions that were not cited**
18 **in your direct testimony that support RUCO's position of disallowing**
19 **tank maintenance expenses?**

20 **A. Yes, in Decision No. 74294 (dated January 29, 2014),⁸ New River Utility**
21 **Company requested a total of \$470,000 to have all of its steel tanks**
22 **recoated within the next six years, and asked to have this cost amortized**
23 **over the next 15 years. This resulted in a pro-forma adjustment of \$31,333.**

24

25

⁸ Docket No. W-01737A-12-0478.

1 **Q. What was Staff position?**

2 A. Staff's position was that the tank recoating expense was not a historical
3 cost, and was not *known and measureable*. In addition, Staff was
4 concerned that the money would not be used for tank recoating expenses.
5 This position is *consistent* with what RUCO is recommending in this case.
6

7 **Q. Did the New River Utility Company state that the Commission had**
8 **approved normalized tank coating expenses, based on projections, in**
9 **Decision No. 73145?⁹**

10 A. Yes. However, this argument was rejected because this case was part of a
11 settlement agreement. In a settlement agreement none of the parties'
12 positions can be relied on, cited to, or relied upon as precedent.
13

14 **Q. Was the Company allowed to recover a small portion of its requested**
15 **tank maintenance expense in that case?**

16 A. Yes, it was noted that:
17 *"In this case, the evidence establishes that New River has an obligation to*
18 *incur a \$130,000 expense for tank painting to be commenced in the next*
19 *few months."*¹⁰
20

21 **Q. Were there any compliance requirements placed on New River Utility**
22 **Company in that case to protect ratepayers?**

23 A. Yes. New River Utility Company must provide as a compliance filing by June
24 2, 2014, documentation that the tank recoating has been completed.
25

⁹ Arizona-American Water Company Docket No. W-01303A-10-0448.

¹⁰ See Decision No. 74294, page 29, line 21.

1 **Q. Does there appear to be an inconsistency between what Staff**
2 **recommended in the New River case, and what has been**
3 **recommended here?**

4 **A. Yes, and Staff will need to differentiate the two cases.**
5

6 **Operating Income Adjustment No. 8 – Depreciation Expense**

7 **Q. Did you explain RUCO's calculation of depreciation expense in its**
8 **direct testimony?**

9 **A. Yes.**
10

11 **Q. Have you updated your depreciation expense schedule to account for**
12 **changes in plant?**

13 **A. Yes.**
14

15 **Operating Income Adjustment No. 9 – Property Tax Expense**

16 **Q. Did you address RUCO's property tax adjustment in direct testimony?**

17 **A. Yes.**
18

19 **Q. Would RUCO like to make any changes to its surrebuttal testimony in**
20 **regards to property tax expense?**

21 **A. Yes. Based on Staff's direct testimony, RUCO agrees that a 3 year average**
22 **of the property tax assessment ratio is appropriate, and therefore, has**
23 **reduced the property tax ratio from 19.00 percent to 18.50 percent, as**
24 **shown on RUCO schedule JMM-22.**
25
26

Operating Income Adjustment No. 10 – Income Tax Expense

Q. Have you recalculated income tax expense based on RUCO's surrebuttal recommended adjusted operating income?

A. Yes, as shown on schedule JMM-23.

Q. Would you like to address any other issues related to income tax expense at this time?

A. Yes. The issue of Excess Deferred Income Taxes, that arises because of House Bill ("HB") 2001.

Q. Did Staff address these issues in the recent Litchfield Park Service Company cases?¹¹

A. Yes. On page 33, Staff in its direct testimony asked the Company to first determine the amount of excess deferred income tax related to the change in State income tax, and present a plan, within 60 days of a Commission decision in this matter on how to refund any excess State income tax recoveries to rate payers.

Q. Did Staff reiterate this recommendation in its surrebuttal testimony in that case?

A. Yes, on page 3 of its surrebuttal testimony, Staff stated the following:

"Q. Has Staff unfairly singled the Company out with its recommendation?

¹¹ Litchfield Park Service Company Docket Nos. SW-01428A-13-0042 and W-01428A-13-0043.

1 A. No, not at all. In fact, although it has been quite some time since
2 corporate income tax rates have changed; Staff cited a specific previous
3 case in its direct testimony. The Company is the first utility, that Staff is
4 aware of, that is using the new lower state corporate income tax rates in
5 its rate filing.

6

7 **Q. Is Staff recommending that the Company perform unnecessary or**
8 **burdensome tasks?**

9 A. No not at all. The Company will need to keep track of any deferred
10 income tax issues as a normal part of its bookkeeping. Staff is just
11 recommending that the Company provide the Commission with a plan
12 to deal with the potential refunding of deferred income taxes arising from
13 new lower corporate income tax rates. This was required by the
14 Commission when the federal corporate income tax rates were lowered
15 by the Tax Reform Act of 1986. Staff continues to support its
16 recommendation (DT page 34, lines 14 -18)."

17

18 **Q. Did Staff ask the same to be done in this case?**

19 A. No.

20

21 **Q. What is RUCO's position?**

22 A. RUCO is okay with the plan agreed to by both Staff and the Company in
23 that case. But it seems unfair to ask one water utility company to put
24 together a plan of administration for excessive deferred income taxes and
25 not others.

26

III. Rate Design

Q. Has RUCO prepared a summary of the Company's present rates, proposed rates, and RUCO's surrebuttal recommended rates for the Company?

A. Yes, see Surrebuttal Schedule JMM-24.

Q. Would you please summarize RUCO's surrebuttal recommended rate design for the 3/4-inch residential customer?

A. RUCO recommends a monthly minimum charge for a 3/4-inch residential customer of \$18.77. No gallons are included in the monthly minimum charge. RUCO recommends the residential water commodity rate for the 3/4-inch residential customer of \$2.6200 per thousand gallons for 1 to 3,000 gallons, \$3.3600 per thousand gallons for 3,001 to 9,000 gallons, and \$4.1900 per thousand gallons for any consumption over 9,000 gallons.

Q. Did RUCO prepare a typical bill analysis for a 3/4 inch customer based on its surrebuttal testimony?

A. Yes. Please see schedule JMM-25.

Q. Did you make any changes to the typical bill analysis?

A. Yes. Due to an error in the calculation of the median average, the Company, RUCO and Staff are in agreement that the median usage for the 3/4 residential customer should be 4,892 gallons instead of 12,000 gallons.

1 **Q. What is the rate impact on a 3/4 inch meter residential customer using**
2 **an average consumption of 7,870 gallons?**

3 A. Under RUCO's recommended rates, a residential 3/4-inch metered
4 customer with an average usage of 7,870 gallons per month will pay \$42.99,
5 which is \$5.15 more than the current \$37.85 or a 13.60 percent increase.
6 By comparison, a residential 3/4-inch metered customer with an average
7 usage of 7,870 gallons per month under the Company's proposed rates
8 would be billed \$50.80, which is \$12.96 more than the current \$37.85 or an
9 increase of 34.23 percent.

10
11 **Q. Has the Company filed a plan of administration for its low income**
12 **program?**

13 A. No.

14
15 **Q. Is RUCO opposed to leaving this document open so that the Company**
16 **can implement a POA at a later date?**

17 A. No.

18
19 **IV. Other Issues**

20 **System Improvement Benefits ("SIB") Mechanism**

21 **Q. Do you have anything additional to add to your surrebuttal testimony**
22 **in regards to a SIB?**

23 A. Yes.

1 **Q. Regardless of RUCO's current position on the SIB can the**
2 **Commission require companies to set aside depreciation expense?**

3 A. Yes, under section 40-222:

4 *"The commission may, after hearing, require public service corporations to*
5 *carry a proper and adequate depreciation account in accordance with*
6 *regulations and forms of account it prescribes. It may ascertain and fix the*
7 *proper and adequate rates of depreciation of the several classes of property*
8 *for each, and each corporation shall conform its depreciation accounts to*
9 *the rates so ascertained and fixed, and shall set aside the money so*
10 *provided for out of earnings and carry such money in a depreciation fund*
11 *and expend the fund, and the income therefrom, only for the purposes and*
12 *under rules and regulations, both as to original expenditure and subsequent*
13 *replacement, as the commission prescribes."*

14
15 **Q. Why is there such a push back from the water industry in Arizona on**
16 **the depreciation set aside?**

17 A. I don't know. If the water and wastewater companies premise is their
18 systems/districts are in dire need of repair, and even with a SIB it is not
19 enough. Then the question becomes why water and wastewater companies
20 won't reinvest the depreciation expense from the SIB into plant replacement
21 infrastructure.

22
23 **Q. Would this provision benefit ratepayers?**

24 A. Yes. Instead of the Company paying these monies back to shareholders or
25 other affiliates/companies, these monies would be set aside and be used to
26 pay for future replacement plant.

1 **Q. Have you reviewed the rebuttal testimony of Company witness**
2 **Candace Coleman regarding the SIB, and do you have any comments?**

3 A. Yes, just one. Any way you try to spin it, a SIB is an additional document
4 outside a rate case that will need to be filed, reviewed/analyzed, and
5 reported on.
6

7 **Sustainable Water Surcharge ("SWS") Mechanism**

8 **Q. Have you read the rebuttal testimony of Company witness Jake**
9 **Landerking regarding the SWS mechanism?**

10 A. Yes.
11

12 **Q. Please comment on Mr. Landerking's statement that "RUCO requests**
13 **that a component in the calculation be included for customer growth.**
14 **The Company disagrees. We are requesting a simple adjuster**
15 **mechanism that allows for the change in costs to be accounted for.**
16 **We are worried that adding additional complexity to the mechanism**
17 **will make it difficult to file and difficult to review by Staff". Is this**
18 **surprising to you?**

19 A. No not in the least. As mentioned to in my direct testimony these adjuster
20 mechanisms are one sided in favor of the Company and at the very least
21 ratepayers should receive some type of benefit as part of the regulatory
22 compact.
23
24

1 **Q. Please respond to Mr. Landerking's comment that this would put some**
2 **type of additional complexity or burden on both the Company and**
3 **Staff?**

4 A. Seriously, in comparison to a SIB or ACRM this is a piece of cake. That
5 being said, a simple one line component on the Company's proposed tariff
6 for customer growth would be sufficient. The calculation would not have to
7 be part of the filing, only used as verification.

8
9 **Q. How did the Company calculate customer growth in this case?**

10 A. The Company in this case utilized a simple two page calculation (see
11 Attachment E) in its initial filing to derive a customer growth amount of
12 \$36,974 (i.e. \$27,555 + \$9,419) for the test year.

13
14 **Q. Please respond to the Mr. Landerking's comment that somehow the**
15 **Company is being penalized for proposing a mechanism that allows**
16 **for complete recovery of this vital expense?**

17 A. As stated in RUCO's direct testimony, RUCO has projected anticipated CAP
18 costs and recommended a deferral and subsequent true-up of any over or
19 under collection be accounted for in the Company's next rate case (less any
20 M&I amount related to the used and useful issue alluded to earlier) as has
21 been historically done.

22
23 The SWS mechanism proposed by the Company would cut the regulatory
24 lag between rate cases, and as a result the Company is less *risky*, since
25 you are truing-up cost every year instead of three or five years. Therefore,
26 if the Company is less *risky* your return on equity should be less.

1 **Q. Please comment on Mr. Landerking's statement that the Company**
2 **opposes a rate case expense recovery surcharge as unnecessary?**

3 A. Just as the Company considers this surcharge that protects ratepayers
4 unnecessary, RUCO considers the SWS unnecessary.

5
6 **Q. Why has RUCO linked this proposal to the CAP water expense?**

7 A. As stated in my direct testimony the Commission has been transitioning
8 away from traditional ratemaking into surcharges and adjuster mechanisms.
9 This being the case RUCO believes that a few of these should benefit
10 ratepayers.

11
12 This surcharge safeguard's ratepayers in the event the Company over-
13 collects on rate case expense. Conversely this surcharge safeguard's the
14 Company in the event of under-collection. So both the ratepayers and
15 Company's interests are protected.

16
17 This adjuster was also tied to the CAP water expense to address Staff's
18 concerns in the Pima Case:¹²

19 "While almost every expense incurred by a utility could be potentially
20 surcharged to customers, it is more appropriate to allow Pima to recover
21 through rates. Including costs in rates can encourage utilities to find
22 efficiencies and economies when operating its businesses."
23

¹² Pima Utility Company Docket No. W-021994-11-0329 and SW-021994-11-0330.

1 RUCO generally agrees with that proposition, However, since Staff is in
2 agreement with a SWS, then this argument regarding a rate case expense
3 recovery surcharge is no longer valid.

4
5 **Q. Does RUCO believe a rate case expense recovery surcharge is valid**
6 **in this case?**

7 A. Yes. The Commission awarded the Company rate case expense of
8 \$280,000 to be amortized over 3 years in Decision No. 71308 (dated
9 October 21, 2009), putting aside the fact that the Company was awarded
10 additional rate case expense in the rehearing. It is now February 7, 2014,
11 and the Company is overearning.

12

13 **Plant Additions and Deletions**

Geoff Becken

14 **Q. Has RUCO read the direct testimony of Staff witness Mary J. Rimback,**
15 **and rebuttal testimony of Sheryl L. Hubbard, regarding accumulated**
16 **depreciation?**

17 A. Yes.

18

19 **Q. Can you discuss what has happened in the interim between the filings**
20 **of RUCO's direct and surrebuttal testimony in regards to the**
21 **Company's plant-in-service?**

22 A. As mentioned and documented in Attachment D of RUCO's direct
23 testimony, the Company was still in the process of gathering invoices from
24 the prior owner, and tying out excel sub-ledgers to support their plant
25 additions and retirements by year and by plant account (schedules that they
26 should have originally filed with their rate case application).

1 **Q. Please elaborate?**

2 A. The Company provided both Staff and RUCO plant invoices above \$5,000
3 for its plant-in-service for the years 2011 and 2012 just prior to the filing of
4 the parties' direct testimony. However, the plant invoices did not tie to a
5 particular plant account. Since the Company did not provide an excel sub-
6 ledger as an intermediary between the plant invoices and the amounts
7 shown on their plant additions and deletions spreadsheet by year and plant
8 account number it was difficult to decipher which invoices belonged to which
9 plant account numbers. The Company then through several supplemental
10 data requests was finally able to tie the invoices to an excel sub-ledger and
11 then back to the plant additions and deletions spreadsheet.

12

13 **Q. Did the Company provide both RUCO and Staff with audited financial**
14 **statements from the Company's outside auditors?**

15 A. Yes, this was probably the Company's only saving grace from a complete
16 write-down of its plant-in-service to 2006 levels.

17

18 Although the audited financial statements do provide RUCO with some
19 comfort they do not provide RUCO with absolute assurance.

20

21 **Q. Please explain?**

22 A. The audited financial statements for plant are functionalized, as
23 summarized in note 3 of the Company's financial statements for 2012:

| | | | |
|----|------------------------|----|-----------|
| 24 | Land | \$ | 271,857 |
| 25 | Intangible assets | | 1,282,734 |
| 26 | Source of water supply | | 3,380,364 |

| | | |
|---|-------------------------------|----------------------|
| 1 | Pumping | 6,116,712 |
| 2 | Water treatment | 7,144,157 |
| 3 | Transmission and distribution | 45,520,225 |
| 4 | Other property and equipment | <u>1,901,252</u> |
| 5 | | <u>\$ 65,617,301</u> |
| 6 | | |
| 7 | Accumulated depreciation | <u>\$ 25,734,123</u> |
| 8 | | |
| 9 | | |

10 These were the numbers the Company started with in its B-2 schedule,
11 column A. However, they do not translate into the level of detail required by
12 the National Association of Regulatory Utility Commissioners ("NARUC")
13 Uniform System of Accounts ("USOA").
14

15 **Q. What problems has RUCO identified with the Company's schedule of**
16 **plant additions and deletions?**

17 **A.** The first problem RUCO had with the Company's representations are the
18 plant amounts presented in the Company's plant additions and deletion
19 schedules do not support the amounts presented in the annual reports
20 submitted to the ACC. For example, in account 339 Other Plant and
21 Miscellaneous Equipment the Company's recalculated December 2008
22 balance was \$1,610,687 while the 2008 ACC Annual Report balance
23 reported a total of \$134,744. There are numerous other discrepancies
24 between the Company's plant amounts and the amounts submitted to the
25 ACC. The Company has brushed these off as reclassification errors. When
26 questioned about why the Company thought its recalculated numbers were

1 the correct ones the Company could not definitively state why they thought
2 their numbers were correct.¹³

3
4 RUCO acknowledges that the total plant balances at the end of each year
5 match those included in the Company's recalculated plant additions and
6 deletions schedule, ACC report, and audited financial statements.

7
8 **Q. If the plant balances match then why is this problematic?**

9 A. Because each plant account has a different depreciation rate. For example,
10 account 306 Lakes, Rivers, Other Intakes has a depreciation rate of 2.50
11 percent, while account 341 Transportation Equipment has a depreciation
12 rate of 20 percent. Depending on which account the amount was
13 misclassified-in, could result in a huge difference in accumulated
14 depreciation expense. For illustration purposes, if \$1,000,000 were
15 depreciated at 2.50 percent for five years the accumulated depreciation
16 amount would be \$125,000, if the same \$1,000,000 were depreciated at 20
17 percent for five years the accumulated depreciation amount would be
18 \$1,000,000 a difference of \$875,000.

19
20 **Q. What is the second problem RUCO has with the Company's schedule**
21 **of plant additions and deletions?**

22 A. RUCO notes that the Company's schedules start with the plant amounts by
23 plant account ***but not the accumulated depreciation balances approved***
24 ***in the last rate case decision No. 71308.*** The Company then reverses
25 former Staff witness Mr. Marvin Milsaps previous rate case adjustments to

¹³ See RUCO data request 7.02 C, submitted in RUCO's direct testimony Attachment D.

1 come-up with a 2006 starting test year balance, and then rolls that balance
2 forward, adding back the CAP acquisition adjustment in 2007, and the
3 remainder of Mr. Milsaps adjustments in 2009 and in 2010 (see Attachment
4 F for a copy of the Company's additions and retirements schedules).

5

6 **Q. In your experience is this common practice in regulatory rate making?**

7 A. No. This is a first for me.

8

9 **Q. You mentioned that the Company did not provide the beginning**
10 **accumulated depreciation balances approved in the last decision, with**
11 **the Company's plant additions. What is common practice?**

12 A. Usually, the Company provides the plant balances and accumulated
13 depreciation balances from the last rate case decision. Then additions and
14 retirements by year and by plant account since the last rate case are
15 recorded, along with the depreciation expense (calculated using the half-
16 year convention), and the accumulated depreciation balances by plant
17 account and by year. Again this is information that the Company should
18 have provided in its initial rate case filing.

19

20 **Q. Did RUCO in a data request ask for the accumulated depreciation**
21 **balances for each plant account by year and by plant account?**

22 A. Yes, RUCO asked for the plant accumulated depreciation balances for each
23 plant account (e.g. account 307 Wells) by year since the Company's last
24 rate case, along with the depreciation expense calculation for each plant
25 account by year since the Company's last rate case in excel format.

26

1 **Q. What did RUCO receive?**

2 A. A mixture of things, some hard coded general ledger accumulated
3 depreciation excel sheets along with some accumulated depreciation
4 sheets calculated using the half-year convention of depreciation, as shown
5 in Attachment G.

6

7 **Q. So what is the problem?**

8 A. Tie-out problems due to the inconsistent methodologies, which are difficult
9 to decipher.

10

11 **Q. Did Staff recommend an increase in the Company's accumulated**
12 **depreciation?**

13 A. Yes. Staff recommended an increase in the amount of \$413,399, based on
14 its recalculation of plant accumulated balances since the last rate case.

15

16 **Q. Why is Staff's accumulated depreciation adjustment higher and**
17 **depreciation expense adjustment lower than the Company's**
18 **calculations?**

19 A. Staff has reclassified some plant and removed fully depreciated plant assets
20 from its depreciable plant balance since the last rate case, as a result of
21 using the vintage method of depreciation.

22

23

24

25

1 **Q. The Company states in its rebuttal testimony it uses the group method**
2 **approach to calculating depreciation expense. What is the main**
3 **problem with the group method approach to calculating depreciation**
4 **expense?**

5 A. Under the group method of depreciation, plant assets are not considered
6 fully depreciated until they are retired. Stated another way plant assets may
7 be fully depreciated, but continue to remain in these plant accounts until
8 they are eventually retired. The group method approach may cause plant
9 assets to be over depreciated.

10
11 **Q. What are the results of over depreciating plant assets under the group**
12 **method approach?**

13 A. Ratepayers pay again in rates for plant that has already been fully
14 depreciated.

15
16 **Q. Why is this method advantageous for the Company?**

17 A. It provides the Company with additional cash flow.

18
19 **Q. What is the group asset per account by vintage year method of**
20 **depreciation?**

21 A. Under the group asset per account by vintage year method of depreciation,
22 plant assets which are fully depreciated (although they still may remain in
23 service) and are removed from the plant accounts when calculating
24 depreciation expense.

1 **Q. Has Staff been advocating this methodology for a while?**

2 A. Yes. I believe Staff started recommending this methodology in the Bella
3 Vista Water Company case.¹⁴

4
5 **Q. Did Staff again recommend the vintage group method again in the Rio
6 Rico Utilities, Inc. case?**¹⁵

7 A. Yes.

8
9 **Q. Even though the group asset per account by vintage year
10 methodology of depreciation was unsuccessful in the first case (Bella
11 Vista) and partially accepted in the second case (Rio Rico) has the
12 Commission ever fully supported this depreciation methodology?**

13 A. Yes recently, in the New River Utility Company case.¹⁶

14
15 **Q. Does RUCO have any additional recommendations regarding plant
16 additions and deletions?**

17 A. Yes. That the Company use the group asset per account by vintage year
18 methodology of depreciation on a going forward basis. Further, if the
19 Commission is inclined to adopt this methodology going back to the
20 Company's prior rate case then Staff's adjustment to accumulated
21 depreciation and depreciation expense should be accepted.

22

23

¹⁴ Docket No. 02465A-09-0411.

¹⁵ Docket No. WS-02676A-12-0196.

¹⁶ See Decision No. 74294 (Docket No. W-01737A-12-0478).

1 **Q. Even if RUCO were in agreement with the SIB, would RUCO**
2 **recommend a SIB for this Company?**

3 A. No. As demonstrated by the lack of accounting records, and schedules that
4 tie to invoices, the Company would not be a good candidate for a SIB.

5
6 **Q. Does your silence on any of the issues, matters or findings addressed**
7 **in the testimony of any of the witnesses for the Company constitute**
8 **your acceptance of their positions on such issues, matters or**
9 **findings?**

10 A. No. RUCO limited its discussion to the specific issues outlined above.
11 RUCO's lack of response to any issue in this proceeding should not be
12 construed as agreement with the Company's position in its rebuttal
13 testimony; rather, where there is no response RUCO relies on its original
14 direct testimony.

15
16 **Q. Does this conclude your surrebuttal testimony?**

17 A. Yes.

18

19

20

Chaparral City Water Company
Docket No. W-02113A-13-0118
Test Year Ended: December 31, 2012

Surrebuttal Testimony of Jeffrey M. Michlik

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REVENUE REQUIREMENT

| LINE NO. | DESCRIPTION | (A) COMPANY FAIR VALUE | (B) RUCO FAIR VALUE |
|-------------|---------------------------------------|---------------------------------|------------------------------|
| 1 | Adjusted Rate Base | \$ 27,269,321 | \$ 24,769,624 |
| 2 | Adjusted Operating Income (Loss) | \$ 889,596 | \$ 1,195,605 |
| 3 | Current Rate of Return (L2 / L1) | 3.26% | 4.83% |
| 4 | Required Rate of Return | 10.21% | 7.98% |
| 5 | Required Operating Income (L4 * L1) | \$ 2,783,254 | \$ 1,976,616 |
| 6 | Operating Income Deficiency (L5 - L2) | \$ 1,893,658 | \$ 781,011 |
| 7 | Gross Revenue Conversion Factor | 1.6587 | 1.6492 |
| 8 | Required Revenue Increase (L7 * L6) | \$ 3,141,028 | \$ 1,288,039 |
| 9 | Adjusted Test Year Revenue | \$ 9,014,985 | \$ 9,080,945 |
| 10 | Proposed Annual Revenue (L8 + L9) | \$ 12,156,013 | \$ 10,368,984 |
| 11 | Required Increase in Revenue (%) | 34.84% | 14.18% |

References:

Column (A): Company Schedule A-1

Column (B): Staff Schedules JMM-3 and JMM-11

GROSS REVENUE CONVERSION FACTOR

| LINE NO. | DESCRIPTION | (A) | (B) | (C) | (D) |
|--|--|---------------|--------------|---------------|-----|
| <u>Calculation of Gross Revenue Conversion Factor:</u> | | | | | |
| 1 | Revenue | 100.0000% | | | |
| 2 | Uncollectible Factor (Line 11) | 0.5492% | | | |
| 3 | Revenues (L1 - L2) | 99.4508% | | | |
| 4 | Combined Federal and State Income Tax and Property Tax Rate (Line 23) | 38.8151% | | | |
| 5 | Subtotal (L3 - L4) | 60.6356% | | | |
| 6 | Revenue Conversion Factor (L1 / L5) | 1.649195 | | | |
| <u>Calculation of Uncollectible Factor:</u> | | | | | |
| 7 | Unity | 100.0000% | | | |
| 8 | Combined Federal and State Tax Rate (Line 23) | 38.2900% | | | |
| 9 | One Minus Combined Income Tax Rate (L7 - L8) | 61.7100% | | | |
| 10 | Uncollectible Rate | 0.8900% | | | |
| 11 | Uncollectible Factor (L9 * L10) | 0.5492% | | | |
| <u>Calculation of Effective Tax Rate:</u> | | | | | |
| 12 | Operating Income Before Taxes (Arizona Taxable Income) | 100.0000% | | | |
| 13 | Arizona State Income Tax Rate | 6.5000% | | | |
| 14 | Federal Taxable Income (L12 - L13) | 93.5000% | | | |
| 15 | Applicable Federal Income Tax Rate (Line 55) | 34.0000% | | | |
| 16 | Effective Federal Income Tax Rate (L14 x L15) | 31.7900% | | | |
| 17 | Combined Federal and State Income Tax Rate (L13 + L16) | | 38.2900% | | |
| <u>Calculation of Effective Property Tax Factor</u> | | | | | |
| 18 | Unity | 100.0000% | | | |
| 19 | Combined Federal and State Income Tax Rate (L17) | 38.2900% | | | |
| 20 | One Minus Combined Income Tax Rate (L18-L19) | 61.7100% | | | |
| 21 | Property Tax Factor | 0.8510% | | | |
| 22 | Effective Property Tax Factor (L20*L21) | | 0.5251% | | |
| 23 | Combined Federal and State Income Tax and Property Tax Rate (L17+L22) | | | 38.8151% | |
| 24 | Required Operating Income | \$ 1,976,616 | | | |
| 25 | Adjusted Test Year Operating Income (Loss) | 1,195,605 | | | |
| 26 | Required Increase in Operating Income (L24 - L25) | | \$ 781,011 | | |
| 27 | Income Taxes on Recommended Revenue (Col. [E], L52) | \$ 1,072,765 | | | |
| 28 | Income Taxes on Test Year Revenue (Col. [B], L52) | 588,162 | | | |
| 29 | Required Increase in Revenue to Provide for Income Taxes (L27 - L28) | | 484,604 | | |
| 30 | Recommended Revenue Requirement | \$ 1,288,039 | | | |
| 31 | Uncollectible Rate (Line 10) | 0.8900% | | | |
| 32 | Uncollectible Expense on Recommended Revenue (L30*L31) | \$ 11,464 | | | |
| 33 | Adjusted Test Year Uncollectible Expense | \$ - | | | |
| 34 | Required Increase in Revenue to Provide for Uncollectible Exp. (L32-L33) | | 11,464 | | |
| 35 | Property Tax with Recommended Revenue | \$ 244,856 | | | |
| 36 | Property Tax on Test Year Revenue | 233,894 | | | |
| 37 | Increase in Property Tax Due to Increase in Revenue (L35-L36) | | 10,961 | | |
| 38 | Total Required Increase in Revenue (L26 + L29 + L34 + L37) | | \$ 1,288,039 | | |
| <u>Calculation of Income Tax:</u> | | | | | |
| 39 | Revenue | \$ 9,080,945 | \$ 1,288,039 | \$ 10,368,984 | |
| 40 | Operating Expenses Excluding Income Taxes | \$ 7,297,178 | | \$ 7,319,603 | |
| 41 | Synchronized Interest (L56) | \$ 247,696 | | \$ 247,696 | |
| 42 | Arizona Taxable Income (L39 - L40 - L41) | \$ 1,536,071 | | \$ 2,801,685 | |
| 43 | Arizona State Income Tax Rate | 6.5000% | | 6.5000% | |
| 44 | Arizona Income Tax (L42 x L43) | \$ 99,845 | | \$ 182,110 | |
| 45 | Federal Taxable Income (L42 - L44) | \$ 1,436,226 | | \$ 2,619,576 | |
| 46 | Federal Tax on First Income Bracket (\$1 - \$50,000) @ 15% | \$ 7,500 | | \$ 7,500 | |
| 47 | Federal Tax on Second Income Bracket (\$51,001 - \$75,000) @ 25% | \$ 6,250 | | \$ 6,250 | |
| 48 | Federal Tax on Third Income Bracket (\$75,001 - \$100,000) @ 34% | \$ 8,500 | | \$ 8,500 | |
| 49 | Federal Tax on Fourth Income Bracket (\$100,001 - \$335,000) @ 39% | \$ 91,650 | | \$ 91,650 | |
| 50 | Federal Tax on Fifth Income Bracket (\$335,001 - \$10,000,000) @ 34% | \$ 374,417 | | \$ 776,756 | |
| 51 | Total Federal Income Tax | \$ 488,317 | | \$ 890,656 | |
| 52 | Combined Federal and State Income Tax (L44 + L51) | \$ 588,162 | | \$ 1,072,765 | |
| 53 | Applicable Federal Income Tax Rate [Col. [E], L51 - Col. [B], L51] / [Col. [E], L45 - Col. [B], L45] | | | 34.0000% | |
| <u>Calculation of Interest Synchronization:</u> | | | | | |
| 54 | Rate Base | \$ 24,769,624 | | | |
| 55 | Weighted Average Cost of Debt | 1.0000% | | | |
| 56 | Synchronized Interest (L45 X L46) | \$ 247,696 | | | |

RATE BASE - ORIGINAL COST

| LINE NO. | | (A) COMPANY AS FILED | (B) RUCO ADJUSTMENTS | (C) RUCO AS ADJUSTED |
|-------------|---|-------------------------------|----------------------------|-------------------------------|
| 1 | Plant in Service | \$ 69,502,064 | \$ (1,776,008) | \$ 67,726,056 |
| 2 | Less: Accumulated Depreciation | 25,734,123 | (43,103) | 25,691,020 |
| 3 | Net Plant in Service | <u>\$ 43,767,940</u> | <u>\$ (1,732,905)</u> | <u>\$ 42,035,036</u> |
| 4 | | | | |
| 5 | <u>LESS:</u> | | | |
| 6 | | | | |
| 7 | Contributions in Aid of Construction (CIAC) | \$ 14,991,871 | \$ - | \$ 14,991,871 |
| 8 | Less: Accumulated Amortization | 2,529,950 | - | \$ 2,529,950 |
| 9 | Net CIAC | <u>12,461,921</u> | <u>-</u> | <u>\$ 12,461,921</u> |
| 10 | | | | |
| 11 | Advances in Aid of Construction (AIAC) | 4,008,916 | - | 4,008,916 |
| 12 | | | | |
| 13 | Customer Meter Deposits | 1,950 | - | 1,950 |
| 14 | Customer Deposits | - | - | - |
| 15 | Deferred Income Taxes & Credits | 1,271,696 | - | 1,271,696 |
| 17 | FHSD Settlement | 449,580 | | 449,580 |
| 18 | | | | |
| 19 | <u>ADD:</u> | | | |
| 20 | | | | |
| 21 | | | | |
| 22 | Deferred Debits | 686,104 | (686,104) | - |
| 23 | | | | |
| 24 | Working Capital Allowance | 1,009,341 | (80,690) | 928,651 |
| 25 | | | | |
| 26 | | | | |
| 27 | Original Cost Rate Base | <u>\$ 27,269,321</u> | <u>\$ (2,499,697)</u> | <u>\$ 24,769,624</u> |

References:

Column [A]: Company as Filed

Column [B]: Schedule JMM-4

Column (C): Column (A) + Column (B)

SUMMARY OF ORIGINAL COST RATE BASE ADJUSTMENTS

| LINE NO. | ACCT. NO. | DESCRIPTION | (A) COMPANY AS FILED | (B) ADJ #1 Post-Test Year Plant Ref. Sch JMM-5 | (C) ADJ #2 Retirement of Transportation Vehicles Ref. Sch JMM-6 | (D) ADJ #3 Asset Retirement obligation Ref. Sch JMM-7 | (E) ADJ #4 Customer Deposits Ref. Sch JMM-8 | (F) ADJ #5 Removal of CAP Deferral Ref. Sch JMM-9 | (G) ADJ #6 Removal of 24 Months AFUDC and Dep. Expense Ref. Sch JMM-10 | (H) ADJ #7 Cash Working Capital Allowance Ref. Sch JMM-11 | (I) RUCO ADJUSTED |
|----------|-----------|---|----------------------|--|---|---|---|---|--|---|-------------------|
| 1 | 301 | Organization Cost | - | - | - | - | - | - | - | - | 1,554,591 |
| 2 | 302 | Franchise Cost | - | - | - | - | - | - | - | - | 1,778,391 |
| 3 | 303 | Land and Land Rights | 1,554,591 | - | - | - | - | - | - | - | 1,013,959 |
| 4 | 304 | Structures and Improvements | 1,778,391 | - | - | - | - | - | - | - | 159,827 |
| 5 | 305 | Collecting and Impounding Res. | 1,019,211 | - | - | (5,252) | - | - | - | - | 2,201,526 |
| 6 | 306 | Lake River and Other Intakes | - | - | - | - | - | - | - | - | 5,926,668 |
| 7 | 307 | Wells and Springs | 159,827 | - | - | - | - | - | - | - | 6,551,094 |
| 8 | 308 | Infiltration Galleries and Tunnels | - | - | - | - | - | - | - | - | 4,989,253 |
| 9 | 309 | Supply Mains | 2,201,526 | - | - | - | - | - | - | - | 24,390,732 |
| 10 | 310 | Power Generation Equipment | - | - | - | - | - | - | - | - | 10,890,767 |
| 11 | 311 | Electric Pumping Equipment | 5,926,668 | - | - | - | - | - | - | - | 2,916,066 |
| 12 | 312 | Water Treatment Plant | - | - | - | - | - | - | - | - | 2,019,913 |
| 13 | 320.1 | Water Treatment Equipment | 6,551,094 | - | - | - | - | - | - | - | - |
| 14 | 320.2 | Distribution Reservoirs and Standpipes | 4,989,253 | - | - | - | - | - | - | - | - |
| 15 | 330.1 | Transmission and Distribution Mains | 24,390,732 | - | - | - | - | - | - | - | - |
| 16 | 331 | Services | 10,890,767 | - | - | - | - | - | - | - | - |
| 17 | 333 | Midlers | 2,916,066 | - | - | - | - | - | - | - | - |
| 18 | 334 | Hydrants | 2,019,913 | - | - | - | - | - | - | - | - |
| 19 | 335 | Backflow Prevention Devices | - | - | - | - | - | - | - | - | - |
| 20 | 336 | Other Plant and Miscellaneous Equipment | 143,521 | - | - | - | - | - | - | - | - |
| 21 | 339 | Office Furniture and Fixtures | 305,068 | - | - | - | - | - | - | - | - |
| 22 | 340.1 | Computer and Software | - | - | - | - | - | - | - | - | - |
| 23 | 340.2 | Transportation Equipment | 494,662 | - | (77,348) | - | - | - | - | - | - |
| 24 | 341 | Stores Equipment | - | - | - | - | - | - | - | - | - |
| 25 | 342 | Tools and Work Equipment | 190,662 | - | - | - | - | - | - | - | - |
| 26 | 343 | Laboratory Equipment | - | - | - | - | - | - | - | - | - |
| 27 | 344 | Power Operated Equipment | - | - | - | - | - | - | - | - | - |
| 28 | 345 | Communications Equipment | 43,326 | - | - | - | - | - | - | - | - |
| 29 | 346 | Miscellaneous Equipment | - | - | - | - | - | - | - | - | - |
| 30 | 347 | Other Tangible Plant | 41,221 | - | - | - | - | - | - | - | - |
| 31 | 348 | Sub Total | 65,617,301 | - | (77,348) | (5,252) | - | - | - | - | 41,221 |
| 32 | | | | | | | | | | | 65,534,701 |
| 33 | | Post Test Year Plant | | | | | | | | | |
| 34 | 307 | Wells and Springs | 783,374 | 276,206 | - | - | - | - | - | - | 1,069,580 |
| 35 | 311 | Electric Pumping Equipment | 130,000 | (130,000) | - | - | - | - | - | - | - |
| 36 | 312 | Water Treatment Equipment | 409,369 | (336,334) | - | - | - | - | - | - | 73,035 |
| 37 | 320.2 | Distribution Reservoirs and Standpipes | 1,245,860 | (575,439) | - | - | - | - | - | - | 670,421 |
| 38 | 330.1 | Transmission and Distribution Mains | 353,577 | (286,613) | - | - | - | - | - | - | 66,964 |
| 39 | 331 | Services | 410,000 | (410,000) | - | - | - | - | - | - | - |
| 40 | 333 | Midlers | 300,000 | (300,000) | - | - | - | - | - | - | - |
| 41 | 334 | Hydrants | 10,000 | (10,000) | - | - | - | - | - | - | - |
| 42 | 335 | Backflow Prevention Devices | 132,558 | 86,874 | - | - | - | - | - | - | 219,432 |
| 43 | 339 | Office Plant and Miscellaneous Equipment | 9,248 | 389 | - | - | - | - | - | - | 9,637 |
| 44 | 341 | Transportation Equipment | 31,777 | 5,158 | - | - | - | - | - | - | 36,935 |
| 45 | 343 | Tools and Work Equipment | 59,000 | (13,649) | - | - | - | - | - | - | 45,351 |
| 46 | 346 | Communications Equipment | 3,854,763 | (1,693,408) | - | - | - | - | - | - | 2,161,355 |
| 33 | | Total Post Test Year Plant | 3,854,763 | (1,693,408) | - | - | - | - | - | - | 2,161,355 |
| 34 | | Total Plant in Service | \$ 69,502,064 | \$ (1,693,408) | \$ (77,348) | \$ (5,252) | \$ - | \$ - | \$ - | \$ - | \$ 67,726,056 |
| 35 | | Less: Accumulated Depreciation | 25,734,123 | 38,609 | (77,348) | (4,364) | - | - | - | - | 25,691,020 |
| 36 | | Net Plant in Service | \$ 43,767,940 | \$ (1,732,017) | \$ - | \$ (899) | \$ - | \$ - | \$ - | \$ - | \$ 42,035,923 |
| 37 | | | | | | | | | | | |
| 38 | | LESS: | | | | | | | | | |
| 39 | | Contributions in Aid of Construction (CIAC) | \$ 14,991,871 | - | - | - | - | - | - | - | \$ 14,991,871 |
| 40 | | Less: Accumulated Amortization | 2,529,950 | - | - | - | - | - | - | - | 2,529,950 |
| 41 | | Net CIAC (L25 - L26) | 12,461,921 | - | - | - | - | - | - | - | 12,461,921 |
| 42 | | Advances in Aid of Construction (AIAC) | 4,008,916 | - | - | - | - | - | - | - | 4,008,916 |
| 43 | | Customer Meter Deposits | - | - | - | - | - | - | - | - | 1,950 |
| 44 | | Customer Deposits | - | - | - | - | - | - | - | - | - |
| 45 | | Deferred Income Taxes & Credits | 1,271,696 | - | - | - | - | - | - | - | 1,271,696 |
| 46 | | FHSD Settlement | 449,580 | - | - | - | - | - | - | - | 449,580 |
| 47 | | ADD: | | | | | | | | | |
| 48 | | Deferred Debits | 686,104 | - | - | - | - | - | - | - | - |
| 49 | | Working Capital Allowance | 1,009,341 | - | - | - | - | - | - | - | 928,651 |
| 50 | | | | | | | | | | | |
| 51 | | | | | | | | | | | |
| 52 | | | | | | | | | | | |
| 53 | | Original Cost Rate Base | \$ 27,269,321 | \$ (1,732,017) | \$ - | \$ (899) | \$ - | \$ (78,206) | \$ (607,898) | \$ (80,690) | \$ 24,769,624 |

RATE BASE ADJUSTMENT NO. 4 - POST-TEST YEAR PLANT AND ACCUMULATED DEPRECIATION

| LINE NO. | ACCT NO. | DESCRIPTION | [A] COMPANY PROPOSED | [B] RUCO ADJUSTMENTS | [C] RUCO ¹ RECOMMENDED |
|----------|---|---|-------------------------|----------------------------|--------------------------------------|
| 1 | 307 | Wells and Springs | \$ 793,374 | \$ 276,206 | \$ 1,069,580 |
| 2 | 311 | Electric Pumping Equipment | 130,000 | (130,000) | - |
| 3 | 320.2 | Water Treatment Equipment | 409,369 | (336,334) | 73,035 |
| 4 | 330.1 | Distribution Reservoirs and Standpipes | 1,245,860 | (575,439) | 670,421 |
| 5 | 331 | Transmission and Distribution Mains | 353,577 | (286,613) | 66,964 |
| 6 | 333 | Services | 410,000 | (410,000) | - |
| 7 | 334 | Meters | 300,000 | (300,000) | - |
| 8 | 335 | Hydrants | 10,000 | (10,000) | - |
| 9 | 339 | Other Plant and Miscellaneous Equipment | 132,558 | 86,874 | 219,432 |
| 10 | 341 | Transportation Equipment | 9,248 | 389 | 9,637 |
| 11 | 343 | Tools and Work Equipment | 31,777 | 5,158 | 36,935 |
| 12 | 346 | Communications Equipment | 59,000 | (13,649) | 45,351 |
| 13 | Total Test Year Plant | | \$ 3,884,763 | \$ (1,693,408) | \$ 2,191,355 |
| 14 | | | | | |
| 15 | Accumulated Depreciation 1/2 Convention on Post-Test Year Plant | | \$ - | \$ 38,609 | \$ 38,609 |
| 16 | | | | | |
| 17 | | | | | |
| 18 | RUCO's Calculation of Post-Test Year Accumulated Depreciation | | RUCO Recommended | 1/2 Year Depreciation Rate | Accumulated Depreciaton |
| 19 | 307 | Wells and Springs | \$ 1,069,580 | 1.67% | 17,809 |
| 20 | 311 | Electric Pumping Equipment | - | 6.25% | - |
| 21 | 320.2 | Water Treatment Equipment | 73,035 | 1.67% | 1,216 |
| 22 | 330.1 | Distribution Reservoirs and Standpipes | 670,421 | 1.11% | 7,442 |
| 23 | 331 | Transmission and Distribution Mains | 66,964 | 1.00% | 670 |
| 24 | 333 | Services | - | 1.67% | - |
| 25 | 334 | Meters | - | 1.67% | - |
| 26 | 335 | Hydrants | - | 1.00% | - |
| 27 | 339 | Other Plant and Miscellaneous Equipment | 219,432 | 3.34% | 7,318 |
| 28 | 341 | Transportation Equipment | 9,637 | 10.00% | 964 |
| 29 | 343 | Tools and Work Equipment | 36,935 | 2.50% | 923 |
| 30 | 346 | Communications Equipment | 45,351 | 5.00% | 2,268 |
| | | | \$ 2,191,355 | | \$ 38,609 |

¹ Amounts may not reflect other adjustments.

REFERENCES:

Column [A]: Company Filing

Column [B]: Testimony JMM

Column [C]: Column [A] + Column [B]

RATE BASE ADJUSTMENT NO. 2 - RETIREMENT OF TRANSPORTATION EQUIPMENT

| LINE NO. | ACCT NO. | DESCRIPTION | [A] | [B] | [C] |
|-------------|-------------|--------------------------|---------------------|---------------------|----------------------------------|
| | | | COMPANY PROPOSED | RUCO ADJUSTMENTS | RUCO ¹ RECOMMENDED |
| 1 | 341 | Transportation Equipment | \$ 494,662 | \$ (77,348) | \$ 417,314 |
| 2 | | Accumulated Depreciation | 25,734,123 | (77,348) | 25,656,775 |

¹ Amounts may not reflect other adjustments.

REFERENCES:

Column [A]: Company Filing

Column [B]: Testimony JMM

Column [C]: Column [A] + Column [B]

RATE BASE ADJUSTMENT NO. 3 - ASSET RETIREMENT OBLIGATION

| LINE NO. | ACCT NO. | DESCRIPTION | [A] | [B] | [C] |
|-------------|-------------|--------------------------------|---------------------|---------------------|----------------------------------|
| | | | COMPANY PROPOSED | RUCO ADJUSTMENTS | RUCO ¹ RECOMMENDED |
| 1 | 305 | Collecting and Impounding Res. | \$ 1,019,211 | \$ (5,252) | \$ 1,013,959 |
| 2 | | | | | |
| 3 | | Accumulated Depreciation | 25,734,123 | (4,364) | 25,729,759 |

¹ Amounts may not reflect other adjustments.

REFERENCES:

Column [A]: Company Filing
Column [B]: Testimony JMM
Column [C]: Column [A] + Column [B]

Chaparral City Water Company
Docket No. W-02113A-13-0118
Test Year Ended: December 31, 2012

Surrebuttal Schedule JMM-8

RATE BASE ADJUSTMENT NO. 4 - CUSTOMER DEPOSITS

| LINE NO. | ACCT NO. | DESCRIPTION | [A] | [B] | [C] |
|-------------|-------------|-------------------|---------------------|---------------------|----------------------------------|
| | | | COMPANY PROPOSED | RUCO ADJUSTMENTS | RUCO ¹ RECOMMENDED |
| 1 | | Customer Deposits | \$ 1,950 | \$ - | \$ 1,950 |
| 2 | | | | | |

¹ Amounts may not reflect other adjustments.

REFERENCES:

Column [A]: Company Filing

Column [B]: Testimony JMM

Column [C]: Column [A] + Column [B]

RATE BASE ADJUSTMENT NO. 5 - REMOVAL OF DEFERRED CENTRAL ARIZONA PROJECT ("CAP") MAINTENANCE AND INDUSTRIAL ("M&I") CHARGES

| LINE NO. | ACCT NO. | DESCRIPTION | [A] | [B] | [C] |
|-------------|-------------|-----------------|---------------------|---------------------|----------------------------------|
| | | | COMPANY PROPOSED | RUCO ADJUSTMENTS | RUCO ¹ RECOMMENDED |
| 1 | | Deferred Debits | \$ 686,104 | \$ (78,206) | 607,898 |

¹ Amounts may not reflect other adjustments.

REFERENCES:

Column [A]: Company Filing

Column [B]: Testimony JMM

Column [C]: Column [A] + Column [B]

RATE BASE ADJUSTMENT NO. 6 - REMOVAL OF 24 MONTH DEFERRAL OF ALLOWANCE FOR FUNDS USED DURING CONSTRUCTION ("AFUDC") AND DEPRECIATION EXPENSE

| LINE NO. | ACCT NO. | DESCRIPTION | [A] | | [B] | | [C] | |
|-------------|-------------|-----------------|---------------------|---------|---------------------|-----------|----------------------------------|--------|
| | | | COMPANY PROPOSED | | RUCO ADJUSTMENTS | | RUCO ¹ RECOMMENDED | |
| | | Deferred Debits | \$ | 686,104 | \$ | (607,898) | \$ | 78,206 |

¹ Amounts may not reflect other adjustments.

REFERENCES:

Column [A]: Company Filing
Column [B]: Testimony JMM
Column [C]: Column [A] + Column [B]

RATE BASE ADJUSTMENT NO. 7 - CASH WORKING CAPITAL

| LINE NO. | ACCT NO. | DESCRIPTION | [A] | [B] | [C] |
|----------|----------|---------------------------|------------------|------------------|-------------------------------|
| | | | COMPANY PROPOSED | RUCO ADJUSTMENTS | RUCO ¹ RECOMMENDED |
| 1 | | Working Capital Allowance | \$ 1,009,341 | \$ (80,690) | 928,651 |

RUCO's Calculation

| | Proforma Test Year Amount | Revenue Lag (Lead) Days | Expense Lag (Lead) Days | Net Lag (Lead) Days Col. C - Col. D | Lead/Lag Factor Col. E/365 | Cash Working Capital Required Col. B * Col. F |
|---|---------------------------------|-------------------------------|-------------------------------|---|----------------------------------|---|
| (A) | (B) | (C) | (D) | (E) | (F) | (G) |
| OPERATING EXPENSES | | | | | | |
| Labor | 1,010,022 | 34.93 | 13.09 | 21.84 | 0.06 | 60,432 |
| Purchased Water | 1,127,229 | 34.93 | 43.67 | (8.74) | (0.02) | (26,995) |
| Fuel & Power | 611,340 | 34.93 | 27.86 | 7.07 | 0.02 | 11,840 |
| Chemicals | 116,658 | 34.93 | (79.22) | 114.15 | 0.31 | 36,483 |
| Waste Disposal & Other Utilities | 7,113 | 34.93 | 41.90 | (6.97) | (0.02) | (136) |
| Intercompany Support Services | 94,150 | 34.93 | 29.99 | 4.94 | 0.01 | 1,274 |
| Corporate Allocation | 359,073 | 34.93 | 30.00 | 4.93 | 0.01 | 4,849 |
| Outside Services | 508,106 | 34.93 | 88.00 | (53.07) | (0.15) | (73,879) |
| Group Insurance | 178,067 | 34.93 | 12.00 | 22.93 | 0.06 | 11,186 |
| Pensions | 85,086 | 34.93 | 67.98 | (33.05) | (0.09) | (7,705) |
| Regulatory Expense | - | - | - | - | - | - |
| Insurance Other Than Group | 73,025 | 34.93 | (26.14) | 61.07 | 0.17 | 12,218 |
| Customer Accounting (Less Bad Debt Expense) | 292,213 | 34.93 | 26.53 | 8.40 | 0.02 | 6,724 |
| Rents | 1,504 | 34.93 | - | 34.93 | 0.10 | 144 |
| General Office Expense | 164,179 | 34.93 | 39.69 | (4.76) | (0.01) | (2,142) |
| Miscellaneous | 151,474 | 34.93 | (3.22) | 38.15 | 0.10 | 15,832 |
| Maintenance Expense | 186,430 | 34.93 | 17.28 | 17.65 | 0.05 | 9,014 |
| TAXES | | | | | | |
| General Taxes-Property | 244,856 | 34.93 | 213.96 | (179.03) | (0.49) | (120,100) |
| General Taxes-Other | 86,320 | 34.93 | 3.03 | 31.90 | 0.09 | 7,544 |
| Income Tax | 588,162 | 34.93 | 37.00 | (2.07) | (0.01) | (3,337) |
| Interest Expense | 283,560 | 34.93 | 91.25 | (56.32) | (0.15) | (43,755) |
| TOTAL | 5,885,006 | | | CASH WORKING CAPITAL REQUIREMENT | | (100,507) |
| ¹ Amounts may not reflect other adjustments. | | | | | | |
| Company Recommended | | | | | | (19,817) |
| RUCO Adjustment | | | | | | (80,690) |

REFERENCES:

Column [A]: Company Filing
Column [B]: Testimony JMM
Column [C]: Column [A] + Column [B]

OPERATING INCOME STATEMENT - ADJUSTED TEST YEAR AND RUCO RECOMMENDED

| LINE NO. | DESCRIPTION | [A] COMPANY ADJUSTED TEST YEAR AS FILED | [B] RUCO TEST YEAR ADJUSTMENTS | [C] RUCO TEST YEAR AS ADJUSTED | [D] RUCO PROPOSED CHANGES | [E] RUCO RECOMMENDED |
|----------|---------------------------------------|---|---|--|------------------------------------|----------------------------|
| 1 | <u>REVENUES:</u> | | | | | |
| 2 | Metered Water Sales | \$ 8,915,656 | \$ 65,960 | \$ 8,981,616 | \$ 1,288,039 | \$ 10,269,655 |
| 3 | Water Sales-Unmetered | - | - | - | - | - |
| 4 | Other Operating Revenue | 99,329 | - | 99,329 | - | 99,329 |
| 5 | Intentionally Left Blank | - | - | - | - | - |
| 6 | Total Operating Revenues | \$ 9,014,985 | \$ 65,960 | \$ 9,080,945 | \$ 1,288,039 | \$ 10,368,984 |
| 7 | | | | | | |
| 8 | <u>OPERATING EXPENSES:</u> | | | | | |
| 9 | Salaries and Wages | \$ 1,024,112 | \$ (14,090) | \$ 1,010,022 | \$ - | \$ 1,010,022 |
| 10 | Purchased Water | 1,065,953 | 61,276 | 1,127,229 | - | 1,127,229 |
| 11 | Fuel & Power | 605,885 | 5,455 | 611,340 | - | 611,340 |
| 12 | Fuel for Power Production | - | - | - | - | - |
| 13 | Chemicals | 119,266 | (2,608) | 116,658 | - | 116,658 |
| 14 | Waste Disposal | 7,113 | - | 7,113 | - | 7,113 |
| 15 | Intercompany Support Services | 94,150 | - | 94,150 | - | 94,150 |
| 16 | Corporate Allocation | 500,330 | (141,257) | 359,073 | - | 359,073 |
| 17 | Outside Services | 508,106 | - | 508,106 | - | 508,106 |
| 18 | Group Insurance | 178,067 | - | 178,067 | - | 178,067 |
| 19 | Pensions | 85,086 | - | 85,086 | - | 85,086 |
| 20 | Regulatory Expense | 91,668 | - | 91,668 | - | 91,668 |
| 21 | Insurance Other Than Group | 73,025 | - | 73,025 | - | 73,025 |
| 22 | Customer Accounting | 318,959 | - | 318,959 | 11,464 | 330,423 |
| 23 | Rents | 1,504 | - | 1,504 | - | 1,504 |
| 24 | General Office Expense | 164,179 | - | 164,179 | - | 164,179 |
| 25 | Miscellaneous Expenses | 158,553 | (7,079) | 151,474 | - | 151,474 |
| 26 | Maintenance Expense | 388,614 | (202,184) | 186,430 | - | 186,430 |
| 27 | Depreciation and Amortization Expense | 2,014,048 | (121,167) | 1,892,881 | - | 1,892,881 |
| 28 | General Taxes - Property Taxes | 251,038 | (17,144) | 233,894 | 10,961 | 244,856 |
| 29 | General Taxes-Other | 86,320 | - | 86,320 | - | 86,320 |
| 30 | Income Taxes | 389,412 | 198,750 | 588,162 | 484,604 | 1,072,765 |
| 31 | Interest on Customer Deposits | - | - | - | - | - |
| 32 | Total Operating Expenses | \$ 8,125,389 | \$ (240,048) | \$ 7,885,340 | \$ 507,028 | \$ 8,392,368 |
| 33 | Operating Income (Loss) | \$ 889,596 | \$ 306,008 | \$ 1,195,605 | \$ 781,011 | \$ 1,976,616 |

References:

Column (A): Company Schedule C-1
Column (B): Schedule JMM-12
Column (C): Column (A) + Column (B)
Column (D): Schedules JMM-20 and JMM-21
Column (E): Column (C) + Column (D)

SUMMARY OF OPERATING INCOME STATEMENT ADJUSTMENTS - TEST YEAR

| JNE NO. | DESCRIPTION | (A) COMPANY AS FILED | (B) Reverse Declining Usage Expense ADJ #1 Ref. Sch JMM-13 | (C) Excessive Water Loss ADJ #2 Ref. Sch JMM-14 | (D) Incentive Pay ADJ #3 Ref. Sch JMM-15 | (E) Increase Purchase Water Expense ADJ #4 Ref. Sch JMM-16 | (F) Expense Allocation ADJ #5 Ref. Sch JMM-17 | (G) Conservation Expense ADJ #6 Ref. Sch JMM-18 | (H) Tank Maintenance Expense ADJ #7 Ref. Sch JMM-19 | (I) Depreciation Expense ADJ #8 Ref. Sch JMM-20 | (J) Property Tax Expense ADJ #9 Ref. Sch JMM-21 | (K) Income Tax Expense ADJ #10 Ref. Sch JMM-21 | (L) RUCO ADJUSTED |
|---------|---------------------------------------|-------------------------|---|--|---|---|--|--|--|--|--|---|----------------------|
| 1 | REVENUES: | | | | | | | | | | | | |
| 2 | Metered Water Sales | \$ 8,915,656 | \$ 65,960 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 8,981,616 |
| 3 | Water Sales-Unmetered | | | | | | | | | | | | |
| 4 | Other Operating Revenue | 99,329 | - | - | - | - | - | - | - | - | - | - | 99,329 |
| 5 | Intentionally Left Blank | | | | | | | | | | | | |
| 6 | Total Operating Revenues | \$ 9,014,985 | \$ 65,960 | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 9,080,945 |
| 7 | | | | | | | | | | | | | |
| 8 | OPERATING EXPENSES: | | | | | | | | | | | | |
| 9 | Salaries and Wages | \$ 1,024,112 | \$ - | \$ - | \$ (14,090) | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ - | \$ 1,010,022 |
| 10 | Purchased Water | 1,065,953 | 13,196 | (39,598) | - | 87,678 | - | - | - | - | - | - | 1,127,229 |
| 11 | Fuel & Power | 605,885 | 7,501 | (2,046) | - | - | - | - | - | - | - | - | 611,340 |
| 12 | Fuel for Power Production | - | - | - | - | - | - | - | - | - | - | - | - |
| 13 | Chemicals | 119,266 | 1,476 | (4,084) | - | - | - | - | - | - | - | - | 116,658 |
| 14 | Waste Disposal | 7,113 | - | - | - | - | - | - | - | - | - | - | 7,113 |
| 15 | Intercompany Support Services | 94,150 | - | - | - | - | - | - | - | - | - | - | 94,150 |
| 16 | Corporate Allocation | 500,330 | - | - | - | - | (141,257) | - | - | - | - | - | 359,073 |
| 17 | Outside Services | 508,106 | - | - | - | - | - | - | - | - | - | - | 508,106 |
| 18 | Group Insurance | 178,007 | - | - | - | - | - | - | - | - | - | - | 178,007 |
| 19 | Pensions | 85,086 | - | - | - | - | - | - | - | - | - | - | 85,086 |
| 20 | Regulatory Expense | 91,668 | - | - | - | - | - | - | - | - | - | - | 91,668 |
| 21 | Insurance Other Than Group | 73,025 | - | - | - | - | - | - | - | - | - | - | 73,025 |
| 22 | Customer Accounting | 318,959 | - | - | - | - | - | - | - | - | - | - | 318,959 |
| 23 | Rents | 1,504 | - | - | - | - | - | - | - | - | - | - | 1,504 |
| 24 | General Office Expense | 164,179 | - | - | - | - | - | - | - | - | - | - | 164,179 |
| 25 | Miscellaneous Expenses | 158,553 | - | - | - | - | - | (7,079) | - | - | - | - | 151,474 |
| 26 | Maintenance Expense | 389,614 | - | - | - | - | - | - | (202,184) | - | - | - | 187,430 |
| 27 | Depreciation and Amortization Expense | 2,014,048 | - | - | - | - | - | - | - | (121,167) | - | - | 1,892,881 |
| 28 | General Taxes - Property Taxes | 251,038 | - | - | - | - | - | - | - | - | (17,144) | - | 233,894 |
| 29 | General Taxes - Other | 86,320 | - | - | - | - | - | - | - | - | - | - | 86,320 |
| 30 | Income Taxes | 389,412 | - | - | - | - | - | - | - | - | - | 198,750 | 588,162 |
| 31 | Interest on Customer Deposits | | | | | | | | | | | | |
| 32 | Total Operating Expenses | \$ 8,125,389 | \$ 22,173 | \$ (45,728) | \$ (14,090) | \$ 87,678 | \$ (141,257) | \$ (7,079) | \$ (202,184) | \$ (121,167) | \$ (17,144) | \$ 198,750 | \$ 7,895,340 |
| 33 | Operating Income (Loss) | \$ 889,596 | \$ 43,787 | \$ 45,728 | \$ 14,090 | \$ (87,678) | \$ 141,257 | \$ 7,079 | \$ 202,184 | \$ 121,167 | \$ 17,144 | \$ (198,750) | \$ 1,195,605 |

Chaparral City Water Company
Docket No. W-02113A-13-0118
Test Year Ended: December 31, 2012

Surrebuttal Schedule JMM-14

OPERATING INCOME ADJUSTMENT NO. 1 - REVERSE DECLINING USAGE ADJUSTMENT

| LINE NO. | DESCRIPTION | [A] | [B] | [C] |
|-------------|---------------------|---------------------|---------------------|----------------------------------|
| | | COMPANY PROPOSED | RUCO ADJUSTMENTS | RUCO ¹ RECOMMENDED |
| 1 | Metered Water Sales | \$ 8,915,656 | \$ 65,960 | \$ 8,981,616 |
| 2 | | | | |
| 3 | Purchased Water | \$ 1,065,953 | \$ 13,196 | \$ 1,079,149 |
| 4 | | | | |
| 5 | Fuel and Power | \$ 605,885 | \$ 7,501 | \$ 613,386 |
| 6 | | | | |
| 7 | Chemicals | \$ 119,266 | \$ 1,476 | \$ 120,742 |
| 8 | | | | |

¹ Amounts may not reflect other adjustments.

REFERENCES:

Column [A]: Company Filing

Column [B]: Testimony JMM

Column [C]: Column [A] + Column [B]

OPERATING INCOME ADJUSTMENT NO. 2 - EXCESS WATER LOSS

| LINE NO. | DESCRIPTION | [A] | [B] | [C] |
|-------------|-----------------|---------------------|---------------------|----------------------------------|
| | | COMPANY PROPOSED | RUCO ADJUSTMENTS | RUCO ¹ RECOMMENDED |
| 1 | Purchased Water | \$ 1,065,953 | \$ (39,598) | \$ 1,026,355 |
| 2 | | | | |
| 3 | Fuel and Power | \$ 605,885 | \$ (2,046) | \$ 603,839 |
| 4 | | | | |
| 5 | Chemicals | \$ 119,266 | \$ (4,084) | \$ 115,182 |
| 6 | | | | |

¹ Amounts may not reflect other adjustments.

REFERENCES:

Column [A]: Company Filing

Column [B]: Testimony JMM

Column [C]: Column [A] + Column [B]

Chaparral City Water Company
Docket No. W-02113A-13-0118
Test Year Ended: December 31, 2012

Surrebuttal Schedule JMM-16

OPERATING INCOME ADJUSTMENT NO. 3 - INCENTIVE PAY

| LINE NO. | DESCRIPTION | [A] | [B] | [C] |
|-------------|--------------------|---------------------|---------------------|---------------------|
| | | COMPANY PROPOSED | RUCO ADJUSTMENTS | RUCO RECOMMENDED |
| 1 | Salaries and Wages | \$ 1,024,112 | \$ (14,090) | \$ 1,010,022 |

RUCO's Calculation of Incentive Pay

| | |
|---|------------------|
| Incentive pay included in labor expense | \$ 28,180 |
| Sharing between ratepayers and shareholders | 50.00% |
| Incentive pay | <u>\$ 14,090</u> |

REFERENCES:

Column [A]: Company Filing
Column [B]: Testimony JMM
Column [C]: Column [A] + Column [B]

OPERATING INCOME ADJUSTMENT NO. 4 - PURCHASED WATER EXPENSE

| LINE NO. | DESCRIPTION | [A] | [B] | [C] |
|--|---|---------------------|---------------------|----------------------------------|
| | | COMPANY PROPOSED | RUCO ADJUSTMENTS | RUCO ¹ RECOMMENDED |
| 1 | Purchased Water | \$ 1,065,953 | \$ 87,678 | \$ 1,153,631 |
| RUCO's Calculation to Increase CAP M&I Charges | | | | |
| | Future CAP Charge 7,943.5 (a.f.) x \$20.80 (average of five years 20 + 21 + 21 + 21 + 21) | | | \$ 165,225 |
| | Schedule CAP Allocation 6,861 (a.f.) x \$146.20 (average of five years 129 + 138 + 149 + 155 + 160) | | | 1,003,078 |
| | Storage at MWD 917 (a.f.) *(\$16) | | | (14,672) |
| | Projected CAP Costs | | | \$ 1,153,631 |
| | Adjusted Test Year | | | \$ 1,065,953 |
| | Recommended Adjustment | | | \$ 87,678 |

¹ Amounts may not reflect other adjustments.

REFERENCES:

Column [A]: Company Filing
Column [B]: Testimony JMM
Column [C]: Column [A] + Column [B]

OPERATING INCOME ADJUSTMENT NO. 5 - CORPORATE ALLOCATION EXPENSE

| LINE NO. | DESCRIPTION | [A] | | [B] | | [C] | |
|-------------|---|---------------------|---------|---------------------|-----------|----------------------------------|---------|
| | | COMPANY PROPOSED | | RUCO ADJUSTMENTS | | RUCO ¹ RECOMMENDED | |
| 1 | Corporate Allocation | \$ | 500,330 | \$ | (141,257) | \$ | 359,073 |
| 2 | | | | | | | |
| 3 | <u>RUCO's Summary of Corporate Allocation Disallowances</u> | | | | | | |
| 4 | At-Risk Compensation | \$ | 86,489 | | | | |
| 5 | Corporate Communications | \$ | 6,687 | | | | |
| 6 | Operational Communications | \$ | 2,532 | | | | |
| 7 | EPCOR Community Essentials Council | \$ | 5,595 | | | | |
| 8 | Community Relations | \$ | 23,222 | | | | |
| 9 | Corporate Communications | \$ | 14,630 | | | | |
| | Additional Disallowance for (meal/entertainment, donations, promotions etc.) | \$ | 2,102 | | | | |
| 10 | Total | \$ | 141,257 | | | | |

¹ Amounts may not reflect other adjustments.

REFERENCES:

Column [A]: Company Filing

Column [B]: Testimony JMM

Column [C]: Column [A] + Column [B]

OPERATING INCOME ADJUSTMENT NO. 6 - REMOVE CONSERVATION EXPENSE

| LINE NO. | DESCRIPTION | [A] | [B] | [C] |
|-------------|------------------------|---------------------|---------------------|----------------------------------|
| | | COMPANY PROPOSED | RUCO ADJUSTMENTS | RUCO ¹ RECOMMENDED |
| 1 | Miscellaneous Expenses | \$ 158,553 | \$ (7,079) | \$ 151,474 |

¹ Amounts may not reflect other adjustments.

REFERENCES:

Column [A]: Company Filing

Column [B]: Testimony JMM

Column [C]: Column [A] + Column [B]

Chaparral City Water Company
Docket No. W-02113A-13-0118
Test Year Ended: December 31, 2012

Surrebuttal Schedule JMM-20

OPERATING INCOME ADJUSTMENT NO. 7 - REMOVE TANK MAINTENANCE EXPENSE

| LINE NO. | DESCRIPTION | [A] | [B] | [C] |
|-------------|---------------------|---------------------|---------------------|----------------------------------|
| | | COMPANY PROPOSED | RUCO ADJUSTMENTS | RUCO ¹ RECOMMENDED |
| 1 | Maintenance Expense | \$ 388,614 | \$ (202,184) | \$ 186,430 |

¹ Amounts may not reflect other adjustments.

REFERENCES:

Column [A]: Company Filing

Column [B]: Testimony JMM

Column [C]: Column [A] + Column [B]

OPERATING INCOME ADJUSTMENT NO. 7 - DEPRECIATION EXPENSE ON TEST YEAR PLANT

| LINE NO. | ACCT NO. | DESCRIPTION | [A] PLANT In SERVICE Per Staff | [B] NonDepreciable or Fully Depreciated PLANT | [C] DEPRECIABLE PLANT (Col A - Col B) | [D] DEPRECIATION RATE | [E] DEPRECIATION EXPENSE (Col C x Col D) |
|----------|----------|---|---|--|--|-----------------------------|---|
| 1 | 301 | Organization Cost | \$ - | \$ - | \$ - | 0.00% | \$ - |
| 2 | 302 | Franchise Cost | \$ - | \$ - | \$ - | 0.00% | \$ - |
| 3 | 303 | Land and Land Rights | \$ 1,554,591 | \$ 1,554,591 | \$ - | 0.00% | \$ - |
| 4 | 304 | Structures and Improvements | \$ 1,779,391 | \$ - | \$ 1,779,391 | 3.33% | \$ 59,254 |
| 5 | 305 | Collecting and Impounding Res. | \$ 1,013,959 | \$ - | \$ 1,013,959 | 2.50% | \$ 25,349 |
| 6 | 306 | Lake River and Other Intakes | \$ - | \$ - | \$ - | 2.50% | \$ - |
| 7 | 307 | Wells and Springs | \$ 159,627 | \$ - | \$ 159,627 | 3.33% | \$ 5,316 |
| 8 | 308 | Infiltration Galleries and Tunnels | \$ - | \$ - | \$ - | 6.67% | \$ - |
| 9 | 309 | Supply Mains | \$ 2,201,526 | \$ - | \$ 2,201,526 | 2.00% | \$ 44,031 |
| 10 | 310 | Power Generation Equipment | \$ - | \$ - | \$ - | 5.00% | \$ - |
| 11 | 311 | Electric Pumping Equipment | \$ 5,926,668 | \$ - | \$ 5,926,668 | 12.50% | \$ 740,834 |
| 12 | 320 | Water Treatment Plant | \$ - | \$ - | \$ - | 3.33% | \$ - |
| 13 | 320 | Water Treatment Equipment | \$ 6,551,094 | \$ - | \$ 6,551,094 | 3.33% | \$ 218,151 |
| 14 | 330 | Distribution Reservoirs and Standpipes | \$ 4,989,253 | \$ - | \$ 4,989,253 | 2.22% | \$ 110,761 |
| 15 | 331 | Transmission and Distribution Mains | \$ 24,390,732 | \$ - | \$ 24,390,732 | 2.00% | \$ 487,815 |
| 16 | 333 | Services | \$ 10,890,767 | \$ - | \$ 10,890,767 | 3.33% | \$ 362,663 |
| 17 | 334 | Meters | \$ 2,916,068 | \$ - | \$ 2,916,068 | 8.33% | \$ 242,908 |
| 18 | 335 | Hydrants | \$ 2,019,913 | \$ - | \$ 2,019,913 | 2.00% | \$ 40,398 |
| 19 | 336 | Backflow Prevention Devices | \$ - | \$ - | \$ - | 6.67% | \$ - |
| 20 | 339 | Other Plant and Miscellaneous Equipment | \$ 143,521 | \$ - | \$ 143,521 | 6.67% | \$ 9,573 |
| 21 | 340 | Office Furniture and Fixtures | \$ 305,068 | \$ - | \$ 305,068 | 6.67% | \$ 20,348 |
| 22 | 340.1 | Computer and Software | \$ - | \$ - | \$ - | 20.00% | \$ - |
| 23 | 341 | Transportation Equipment | \$ 417,314 | \$ - | \$ 417,314 | 20.00% | \$ 83,463 |
| 24 | 342 | Stores Equipment | \$ - | \$ - | \$ - | 4.00% | \$ - |
| 25 | 343 | Tools and Work Equipment | \$ 190,662 | \$ - | \$ 190,662 | 5.00% | \$ 9,533 |
| 26 | 344 | Laboratory Equipment | \$ - | \$ - | \$ - | 10.00% | \$ - |
| 27 | 345 | Power Operated Equipment | \$ - | \$ - | \$ - | 5.00% | \$ - |
| 28 | 346 | Communications Equipment | \$ 43,326 | \$ - | \$ 43,326 | 10.00% | \$ 4,333 |
| 29 | 347 | Miscellaneous Equipment | \$ - | \$ - | \$ - | 10.00% | \$ - |
| 30 | 348 | Other Tangible Plant | \$ 41,221 | \$ - | \$ 41,221 | 10.00% | \$ 4,122 |
| 31 | | Total Plant | \$ 65,534,701 | \$ 1,554,591 | \$ 63,980,110 | | \$ 2,468,851 |
| 32 | | | | | | | |
| 33 | | Post Test Year Plant | | | | | |
| 34 | 307 | Wells and Springs | \$ 1,069,580 | \$ - | \$ 1,069,580 | 3.33% | \$ 35,617 |
| 35 | 311 | Electric Pumping Equipment | \$ - | \$ - | \$ - | 12.50% | \$ - |
| 36 | 320.2 | Water Treatment Equipment | \$ 73,035 | \$ - | \$ 73,035 | 3.33% | \$ 2,432 |
| 37 | 330.1 | Distribution Reservoirs and Standpipes | \$ 670,421 | \$ - | \$ 670,421 | 2.22% | \$ 14,883 |
| 38 | 331 | Transmission and Distribution Mains | \$ 66,964 | \$ - | \$ 66,964 | 2.00% | \$ 1,339 |
| 39 | 333 | Services | \$ - | \$ - | \$ - | 3.33% | \$ - |
| 40 | 334 | Meters | \$ - | \$ - | \$ - | 3.33% | \$ - |
| 41 | 335 | Hydrants | \$ - | \$ - | \$ - | 2.00% | \$ - |
| 42 | 339 | Other Plant and Miscellaneous Equipment | \$ 219,432 | \$ - | \$ 219,432 | 6.67% | \$ 14,636 |
| 43 | 341 | Transportation Equipment | \$ 9,637 | \$ - | \$ 9,637 | 20.00% | \$ 1,927 |
| 44 | 343 | Tools and Work Equipment | \$ 36,935 | \$ - | \$ 36,935 | 5.00% | \$ 1,847 |
| 45 | 346 | Communications Equipment | \$ 45,351 | \$ - | \$ 45,351 | 10.00% | \$ 4,535 |
| 46 | | Total Post Test Year Plant | \$ 2,191,355 | \$ - | \$ 2,191,355 | | \$ 77,217 |
| 47 | | | | | | | |
| 48 | | Total | \$ 67,726,056 | \$ 1,554,591 | \$ 66,171,465 | | \$ 2,546,068 |
| 49 | | | | | | | |
| 50 | | Composite Depreciation Rate: | | | | | 3.85% |
| 51 | | Contributions in Aid of Construction ("CIAC"): | | | | | \$ 14,991,871 |
| 52 | | Amortization of CIAC: | | | | | \$ 577,187 |
| 53 | | | | | | | |
| 54 | | Depreciation Expense before Amortization of CIAC: | | | | | \$ 2,546,068 |
| 55 | | Less Amortization of CIAC: | | | | | \$ 577,187 |
| 56 | | Less FHSD Adjustment Amortization: | | | | | \$ 76,000 |
| 57 | | Test Year Depreciation Expense - RUCO | | | | | \$ 1,892,881 |
| 58 | | | | | | | |
| 59 | | Depreciation Expense - Company | | | | | \$ 2,014,048 |
| 60 | | | | | | | |
| 61 | | RUCO's Removal of Deferred CAP Charges | | | | | \$ (15,641) |
| 62 | | | | | | | |
| 63 | | RUCO's Removal of 24 month AFUDC and Depreciation Expense | | | | | \$ (23,586) |
| 64 | | | | | | | |
| 65 | | Adjusted Depreciation Expense | | | | | \$ 1,974,821 |
| 66 | | | | | | | |
| 67 | | RUCO's Adjustment to Depreciation Expense | | | | | \$ (81,940) |
| 68 | | | | | | | |
| 69 | | Total Adjustment (lines 61 + 63 + 69) | | | | | \$ (121,167) |
| 70 | | | | | | | |

References:

Column [A]: Schedule JMM-11
Column [B]: From Column [A]
Column [C]: Column [A] - Column [B]
Column [D]: Staff's Typical Engineering Depreciation Rates
Column [E]: Column [C] x Column [D]

OPERATING INCOME ADJUSTMENT NO. 9 - PROPERTY TAX EXPENSE

| LINE NO. | | [A] RUCO AS ADJUSTED | [B] RUCO RECOMMENDED |
|----------|---|----------------------------|----------------------------|
| 1 | Property Tax Calculation | | |
| 1 | RUCO Adjusted Test Year Revenues | \$ 9,080,945 | \$ 9,080,945 |
| 2 | Weight Factor | 2 | 2 |
| 3 | Subtotal (Line 1 * Line 2) | 18,161,890 | \$ 18,161,890 |
| 4 | RUCO Recommended Revenue, Per Schedule JMM-1 | 9,080,945 | \$ 10,368,984 |
| 5 | Subtotal (Line 4 + Line 5) | 27,242,835 | 28,530,874 |
| 6 | Number of Years | 3 | 3 |
| 7 | Three Year Average (Line 5 / Line 6) | 9,080,945 | \$ 9,510,291 |
| 8 | Department of Revenue Multiplier | 2 | 2 |
| 9 | Revenue Base Value (Line 7 * Line 8) | 18,161,890 | \$ 19,020,583 |
| 10 | Plus: 10% of CWIP - | 161,294 | 161,294 |
| 11 | Less: Net Book Value of Licensed Vehicles | - | \$ - |
| 12 | Full Cash Value (Line 9 + Line 10 - Line 11) | 18,323,184 | \$ 19,181,877 |
| 13 | Assessment Ratio | 18.5% | 18.5% |
| 14 | Assessment Value (Line 12 * Line 13) | 3,389,789 | \$ 3,548,647 |
| 15 | Composite Property Tax Rate (Per Company Schedule) | 6.9000% | 6.9000% |
| 16 | | | \$ - |
| 17 | RUCO Test Year Adjusted Property Tax (Line 14 * Line 15) | \$ 233,894 | |
| 18 | Company Proposed Property Tax | 251,038 | |
| 19 | | | |
| 20 | RUCO Test Year Adjustment (Line 16-Line 17) | \$ (17,144) | |
| 21 | Property Tax - RUCO Recommended Revenue (Line 14 * Line 15) | | \$ 244,856 |
| 22 | RUCO Test Year Adjusted Property Tax Expense (Line 16) | | \$ 233,894 |
| 23 | Increase in Property Tax Expense Due to Increase in Revenue Requirement | | \$ 10,961 |
| 24 | | | |
| 25 | Increase to Property Tax Expense | | \$ 10,961 |
| 26 | Increase in Revenue Requirement | | 1,288,039 |
| 27 | Increase to Property Tax per Dollar Increase in Revenue (Line 19/Line 20) | | 0.850996% |

REFERENCES:

Column [A]: Company Filing
Column [B]: Testimony JMM
Column [C]: Column [A] + Column [B]

OPERATING INCOME ADJUSTMENT NO. 10 - TEST YEAR INCOME TAXES

| LINE NO. | DESCRIPTION | |
|----------|--|---------------|
| 1 | | |
| 2 | | |
| 3 | | |
| 4 | <u>Calculation of Income Tax:</u> | Test Year |
| 5 | Revenue (Schedule JMM-1) | \$ 9,080,945 |
| 6 | Operating Expenses Excluding Income Taxes | \$ 7,297,178 |
| 7 | Synchronized Interest (L17) | \$ 247,696 |
| 8 | Arizona Taxable Income (L1 - L2 - L3) | \$ 1,536,071 |
| 9 | Arizona State Income Tax Rate | 6.5000% |
| 10 | Arizona Income Tax (L4 x L5) | \$ 99,845 |
| 11 | Federal Taxable Income (L4 - L6) | \$ 1,436,226 |
| 12 | Federal Tax on First Income Bracket (\$1 - \$50,000) @ 15% | \$ 7,500 |
| 13 | Federal Tax on Second Income Bracket (\$51,001 - \$75,000) @ 25% | \$ 6,250 |
| 14 | Federal Tax on Third Income Bracket (\$75,001 - \$100,000) @ 34% | \$ 8,500 |
| 15 | Federal Tax on Fourth Income Bracket (\$100,001 - \$335,000) @ 39% | \$ 91,650 |
| 16 | Federal Tax on Fifth Income Bracket (\$335,001 - \$10,000,000) @ 34% | \$ 374,417 |
| 17 | Total Federal Income Tax | \$ 488,317 |
| 18 | Combined Federal and State Income Tax (L44 + L51) | \$ 588,162 |
| 19 | | |
| 20 | | |
| 21 | <u>Calculation of Interest Synchronization:</u> | |
| 22 | Rate Base (Schedule JMM-4) | \$ 24,769,624 |
| 23 | Weighted Average Cost of Debt | 1.10% |
| 24 | Synchronized Interest (L16 x L17) | \$ 272,466 |
| 25 | | |
| 26 | | |
| 27 | Income Tax - Per RUCO | \$ 588,162 |
| 28 | Income Tax - Per Company | \$ 389,412 |
| 29 | RUCO Adjustment | \$ 198,750 |

REFERENCES:

Column [A]: Company Filing
Column [B]: Testimony JMM
Column [C]: Column [A] + Column [B]

Rate Design

| Monthly Usage Charge | Present | Company Proposed Rates | RUCO Recommended Rates |
|--|-----------|---------------------------|---------------------------|
| <u>Meter Size (All Classes):</u> | | | |
| Chaparral Residential 3/4 Inch | \$ 16.50 | \$ 22.20 | \$ 18.77 |
| Chaparral Residential 1 Inch | 27.50 | 37.03 | 31.31 |
| Chaparral Residential 1-1/2 Inch | 55.00 | 74.06 | 62.63 |
| Chaparral Residential 2 Inch | 88.00 | 118.49 | 100.20 |
| Chaparral Residentail 3 Inch | 176.00 | 236.98 | 200.40 |
| Chaparral Residentail 4 Inch | 275.00 | 370.29 | 313.12 |
| Chaparral Residentail 6 Inch | 550.00 | 740.58 | 626.98 |
| Chaparral Residentail 8 Inch | 880.00 | 1,184.92 | 1,001.98 |
| Chaparral Residentail 10 Inch | 1,265.00 | 1,703.32 | 1,440.34 |
| Chaparral Residentail 12 Inch | 2,365.00 | 3,184.47 | 2,692.82 |
| Chaparral Commercial 3/4 Inch | 16.50 | 22.22 | 18.77 |
| Chaparral Commercial 1 Inch | 27.50 | 37.03 | 31.31 |
| Chaparral Commercial 1.5 Inch | 55.00 | 74.06 | 62.63 |
| Chaparral Commercial 2 Inch | 88.00 | 118.49 | 100.20 |
| Chaparral Commercial 3 Inch | 176.00 | 236.98 | 200.40 |
| Chaparral Commercial 4 Inch | 275.00 | 370.29 | 313.12 |
| Chaparral Commercial 6 Inch | 550.00 | 740.58 | 626.98 |
| Chaparral Commercial 8 Inch | 880.00 | 1,184.92 | 1,001.98 |
| Chaparral Commercial 10 Inch | 1,265.00 | 1,703.32 | 1,440.34 |
| Chaparral Commercial 12 Inch | 2,365.00 | 3,184.47 | 2,692.82 |
| Chaparral Irrigation 3/4 Inch | 16.50 | 22.22 | 18.77 |
| Chaparral Irrigation 1 Inch | 27.50 | 37.03 | 31.31 |
| Chaparral Irrigation 1.5 Inch | 55.00 | 74.06 | 62.63 |
| Chaparral Irrigation 2 Inch | 88.00 | 118.49 | 100.20 |
| Chaparral Irrigation 3 Inch | 176.00 | 236.98 | 200.40 |
| Chaparral Irrigation 4 Inch | 275.00 | 370.29 | 313.12 |
| Chaparral Irrigation 6 Inch | 550.00 | 740.58 | 626.98 |
| Chaparral Irrigation 8 Inch | 880.00 | 1,184.92 | 1,001.98 |
| Chaparral Irrigation 10 Inch | 1,265.00 | 1,703.32 | 1,440.34 |
| Chaparral Irrigation 12 Inch | 2,365.00 | 3,184.47 | 2,692.82 |
| Chaparral Hydrant 3/4 Inch | 16.50 | 22.22 | 18.77 |
| Chaparral Hydrant 1 Inch | 27.50 | 37.03 | 31.31 |
| Chaparral Hydrant 1.5 Inch | 55.00 | 74.06 | 62.63 |
| Chaparral Hydrant 2 Inch | 88.00 | 118.49 | 100.20 |
| Chaparral Hydrant 3 Inch | 176.00 | 236.98 | 200.40 |
| Chaparral Hydrant 4 Inch | 275.00 | 370.29 | 313.12 |
| Chaparral Hydrant 6 Inch | 550.00 | 740.58 | 626.98 |
| Chaparral Hydrant 8 Inch | 880.00 | 1,184.92 | 1,001.98 |
| Chaparral Hydrant 10 Inch | 1,265.00 | 1,703.32 | 1,440.34 |
| Chaparral Hydrant 12 Inch | 2,365.00 | 3,184.47 | 2,692.82 |
| Chaparral Fire Sprinklers (All Meter Sizes) | 10.0000 | 13.47 | 13.47 |
| Chaparral Low Income 3/4 Inch | N/A | 14.70 | 11.27 |
| Chaparral Low Income 1 Inch | N/A | 29.53 | 23.81 |
| <u>Commodity Charge - Per 1,000 Gallons</u> | | | |
| <u>3/4" Meter (Residential)</u> | | | |
| First 3,000 gallons | \$ 2.3100 | \$ 3.0926 | \$ 2.6200 |
| 3,001 to 9,000 gallons | 2.9600 | 3.9678 | 3.3600 |
| All gallons over 9,000 | 3.6100 | 4.8431 | 4.1900 |
| <u>3/4" Meter (Commerical)</u> | | | |
| First 9,000 gallons | 2.9600 | 3.9678 | 3.3600 |
| Over 9,000 gallons | 3.6100 | 4.8431 | 4.1900 |
| <u>1" Meter (Residential and Commercial)</u> | | | |
| First 24,000 gallons | 2.9600 | 3.9678 | N/A |
| Over 24,000 gallons | 3.6100 | 4.8431 | N/A |
| <u>1" Meter (Residential and Commercial)</u> | | | |
| First 23,000 gallons | N/A | N/A | 3.3600 |
| Over 23,000 gallons | N/A | N/A | 4.1900 |
| <u>1.5" Meter (Residential and Commercial)</u> | | | |
| First 60,000 gallons | 2.9600 | 3.9678 | N/A |
| Over 60,000 gallons | 3.6100 | 4.8431 | N/A |
| <u>1.5" Meter (Residential and Commercial)</u> | | | |
| First 59,000 gallons | N/A | N/A | 3.3600 |
| Over 59,000 gallons | N/A | N/A | 4.1900 |

Rate Design

| | | | |
|---|--------|--------|--------|
| <u>2" Meter (Residential and Commercial)</u> | | | |
| First 100,000 gallons | 2.9600 | 3.9678 | 3.3600 |
| Over 100,000 gallons | 3.6100 | 4.8431 | 4.1900 |
| <u>3" Meter (Residential and Commercial)</u> | | | |
| First 225,000 gallons | 2.9600 | 3.9678 | N/A |
| Over 225,000 gallons | 3.6100 | 4.8431 | N/A |
| <u>3" Meter (Residential and Commercial)</u> | | | |
| First 218,000 gallons | N/A | N/A | 3.3600 |
| Over 218,000 gallons | N/A | N/A | 4.1900 |
| <u>4" Meter (Residential and Commercial)</u> | | | |
| First 350,000 gallons | 2.9600 | 3.9678 | 3.3600 |
| Over 350,000 gallons | 3.6100 | 4.8431 | 4.1900 |
| <u>6" Meter (Residential and Commercial)</u> | | | |
| First 725,000 gallons | 2.9600 | 3.9678 | 3.3600 |
| Over 725,000 gallons | 3.6100 | 4.8431 | 4.1900 |
| <u>8" Meter (Residential and Commercial)</u> | | | |
| First 1,125,000 gallons | 2.9600 | 3.9678 | 3.3600 |
| Over 1,125,000 gallons | 3.6100 | 4.8431 | 4.1900 |
| <u>10" Meter (Residential and Commercial)</u> | | | |
| First 1,500,000 gallons | 2.9600 | 3.9678 | 3.3600 |
| Over 1,500,000 gallons | 3.6100 | 4.8431 | 4.1900 |
| <u>12" Meter (Residential and Commercial)</u> | | | |
| First 2,250,000 gallons | 2.9600 | 3.9678 | 3.3600 |
| Over 2,250,000 gallons | 3.6100 | 4.8431 | 4.1900 |
| <u>3/4" Meter (Irrigation and Hydrant)</u> | | | |
| All Usage | 2.9600 | 3.9678 | 3.3600 |
| <u>1" Meter (Irrigation and Hydrant)</u> | | | |
| All Usage | 2.9600 | 3.9678 | 3.3600 |
| <u>1.5" Meter (Irrigation and Hydrant)</u> | | | |
| All Usage | 2.9600 | 3.9678 | 3.3600 |
| <u>2" Meter (Irrigation and Hydrant)</u> | | | |
| All Usage | 2.9600 | 3.9678 | 3.3600 |
| <u>3" Meter (Irrigation and Hydrant)</u> | | | |
| All Usage | 2.9600 | 3.9678 | 3.3600 |
| <u>4" Meter (Irrigation and Hydrant)</u> | | | |
| All Usage | 2.9600 | 3.9678 | 3.3600 |
| <u>6" Meter (Irrigation and Hydrant)</u> | | | |
| All Usage | 2.9600 | 3.9678 | 3.3600 |
| <u>8" Meter (Irrigation and Hydrant)</u> | | | |
| All Usage | 2.9600 | 3.9678 | 3.3600 |
| <u>10" Meter (Irrigation and Hydrant)</u> | | | |
| All Usage | 2.9600 | 3.9678 | 3.3600 |
| <u>12" Meter (Irrigation and Hydrant)</u> | | | |
| All Usage | 2.9600 | 3.9678 | 3.3600 |
| Fire Sprinklers (All Meter Sizes) | 2.9600 | 3.9678 | 3.3600 |
| Standpipe Water Service - 2 Inch | 2.9600 | 3.9678 | 3.3600 |
| Low Income 3/4 Inch | | | |
| First 3,000 gallons | N/A | 3.0926 | 2.6200 |
| 3,001 to 9,000 gallons | N/A | 3.9678 | 3.3600 |
| All gallons over 9,000 | N/A | 4.8431 | 4.1900 |
| Low Income 3/4 Inch | | | |
| First 3,000 gallons | N/A | 3.0926 | 2.6200 |
| 3,001 to 9,000 gallons | N/A | 3.9678 | 3.3600 |
| All gallons over 9,000 | N/A | 4.8431 | 4.1900 |

Typical Bill Analysis
General Service 3/4-Inch Meter

| Company Proposed | Gallons | Present Rates | Proposed Rates | Dollar Increase | Percent Increase |
|-------------------------|---------|---------------|----------------|-----------------|------------------|
| Average Usage | 7,870 | \$ 37.85 | \$ 50.80 | \$ 12.96 | 34.23% |
| Median Usage | 4,892 | \$ 29.03 | \$ 38.98 | \$ 9.95 | 34.29% |
| RUCO Recommended | | | | | |
| Average Usage | 7,870 | \$ 37.85 | \$ 42.99 | \$ 5.15 | 13.60% |
| Median Usage | 4,892 | \$ 29.03 | \$ 32.99 | \$ 3.96 | 13.63% |

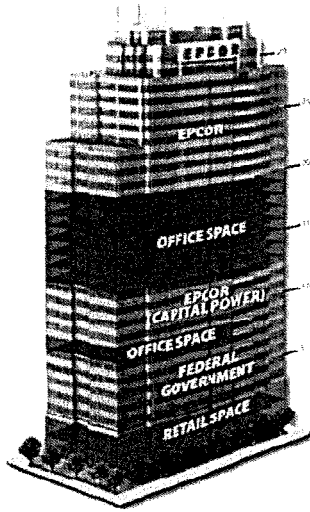
Present & Proposed Rates (Without Taxes)
General Service 3/4-Inch Meter

| Gallons Consumption | Present Rates | Company Proposed Rates | % Increase | RUCO Recommended Rates | % Increase |
|---------------------|---------------|------------------------|------------|------------------------|------------|
| - | \$ 16.50 | \$ 22.20 | 34.55% | \$ 18.77 | 13.76% |
| 1,000 | 18.81 | 25.29 | 34.46% | 21.39 | 13.72% |
| 2,000 | 21.12 | 28.39 | 34.40% | 24.01 | 13.68% |
| 3,000 | 23.43 | 31.48 | 34.35% | 26.63 | 13.66% |
| 4,000 | 26.39 | 35.45 | 34.31% | 29.99 | 13.64% |
| 5,000 | 29.35 | 39.41 | 34.29% | 33.35 | 13.63% |
| 6,000 | 32.31 | 43.38 | 34.27% | 36.71 | 13.62% |
| 7,000 | 35.27 | 47.35 | 34.25% | 40.07 | 13.61% |
| 8,000 | 38.23 | 51.32 | 34.23% | 43.43 | 13.60% |
| 9,000 | 41.19 | 55.28 | 34.22% | 46.79 | 13.60% |
| 10,000 | 44.80 | 60.13 | 34.21% | 50.98 | 13.79% |
| 11,000 | 48.41 | 64.97 | 34.21% | 55.17 | 13.96% |
| 12,000 | 52.02 | 69.81 | 34.21% | 59.36 | 14.11% |
| 13,000 | 55.63 | 74.66 | 34.20% | 63.55 | 14.24% |
| 14,000 | 59.24 | 79.50 | 34.20% | 67.74 | 14.35% |
| 15,000 | 62.85 | 84.34 | 34.20% | 71.93 | 14.45% |
| 16,000 | 66.46 | 89.19 | 34.20% | 76.12 | 14.54% |
| 17,000 | 70.07 | 94.03 | 34.19% | 80.31 | 14.61% |
| 18,000 | 73.68 | 98.87 | 34.19% | 84.50 | 14.69% |
| 19,000 | 77.29 | 103.72 | 34.19% | 88.69 | 14.75% |
| 20,000 | 80.90 | 108.56 | 34.19% | 92.88 | 14.81% |
| 25,000 | 98.95 | 132.77 | 34.18% | 113.83 | 15.04% |
| 30,000 | 117.00 | 156.99 | 34.18% | 134.78 | 15.20% |
| 35,000 | 135.05 | 181.21 | 34.18% | 155.73 | 15.31% |
| 40,000 | 153.10 | 205.42 | 34.17% | 176.68 | 15.40% |
| 45,000 | 171.15 | 229.64 | 34.17% | 197.63 | 15.47% |
| 50,000 | 189.20 | 253.85 | 34.17% | 218.58 | 15.53% |
| 75,000 | 279.45 | 374.93 | 34.17% | 323.33 | 15.70% |
| 100,000 | 369.70 | 496.01 | 34.16% | 428.08 | 15.79% |

Attachment A

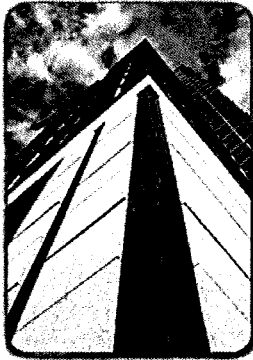
[Home](#) [The Tower](#) [Location](#) [Floor by Floor](#) [Visuals](#) [The Team](#) [News](#) [Tenants](#) [Contact](#)

Interactive Stacking Plan



Please select a floor from
the tower to view the floor
plan

Home The Tower Location Floor by Floor Visuals The Team News Tenants Contact
> Building Specs > Amenities > Leadership in Design



The Tower

Now officially open, EPCOR Tower is Edmonton's first Downtown high rise office in 22 years. It incorporates advanced technologies from the ground up, meeting the demands of today's sophisticated office tenants with features that provide a competitive business advantage.

EPCOR Tower is the first completed development on the Station Lands site. Station Lands is a 9.15 acre, mixed-use development site in the heart of Edmonton's dynamic downtown, within 600 feet of Edmonton City Hall. This comprehensive development brings together commercial, retail, residential and recreational space in a unique design.

Leasing

Floor Plans

Station Lands Project

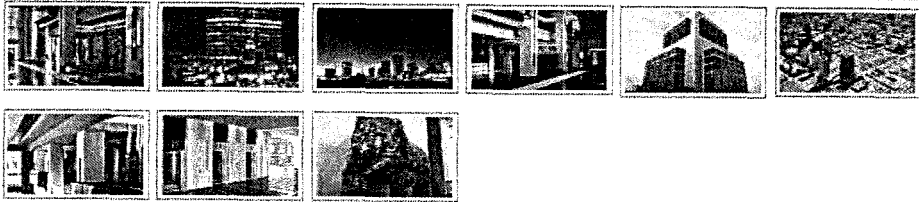
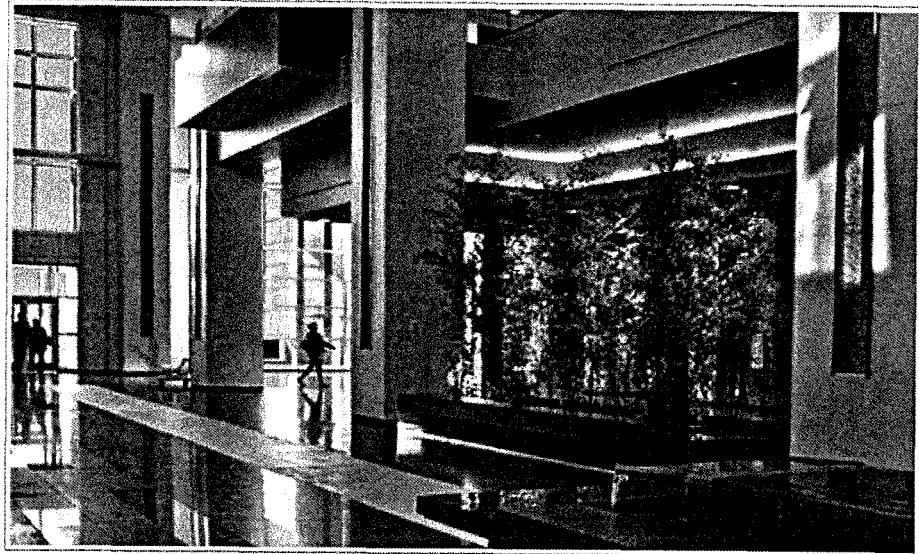
[Home](#) [The Tower](#) [Location](#) [Floor by Floor](#) [Visuals](#) [The Team](#) [News](#) [Tenants](#) [Contact](#)
[> Views](#) [> Aerial](#)



[Leasing](#)

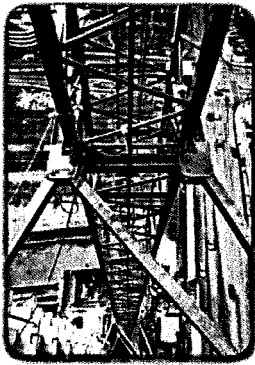
[Floor Plans](#)

[Station Lands Project](#)



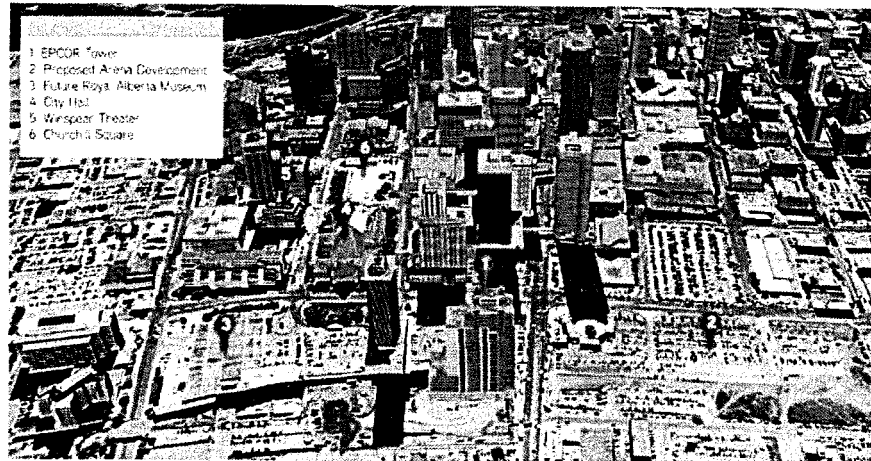
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[> Epcor Aerial](#)
[> Streetview Map](#)



[Leasing](#)
[Floor Plans](#)
[Station Lands Project](#)

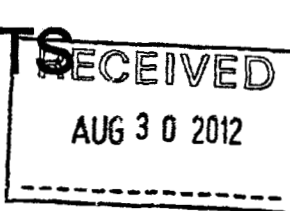
Epcor Aerial



Attachment B

REXALL SPORTS CORP

11230 - 110 Street
Edmonton, Alberta T5G 3H7



ORIGINAL *[Signature]*

SEASON SUMMARY

To: Epcor Utilities Inc.
10065 Jasper Avenue
Edmonton, AB T5J 3B1

July 31, 2012

Suite

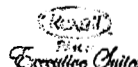
2012/2013 season

| INVOICE # | DESCRIPTION | AMOUNT |
|-----------|------------------------|--------------|
| 464-5146 | Payment Due - 9/1/2012 | \$201,014.35 |

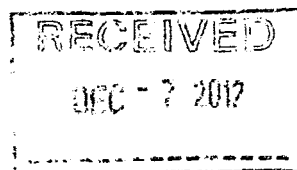
| | |
|-------------------------------|--------------|
| Subtotal | \$201,014.35 |
| GST (Reg. #87183 0980 RT0001) | \$10,050.72 |
| AMOUNT DUE | \$211,065.07 |

| BU | RC | PROJ | ACT | LOC | ACCT | INTERCO | AMOUNT |
|---|-----|--------|------|-----|------|---------|--------------------|
| 40 | 727 | 000000 | 7350 | 950 | 5691 | 0 | 201,014.35 |
| | | | | | | | |
| | | | | | | | |
| CAN <input checked="" type="checkbox"/> | | | | | | | GST 10,050.72 |
| USD <input type="checkbox"/> | | | | | | | Total 211,065.07 |
| Prepared By: <i>[Signature]</i> | | | | | | | Date: Aug 28, 2012 |
| Approved by: <i>[Signature]</i> | | | | | | | |
| (Print name of Approver) <i>Gillian Adams</i> | | | | | | | |

We ask that all payments be in the form of EFT or cheques. Please make all cheques payable to: REXALL SPORTS CORP. Please note that all amounts above have been previously discounted by the advertising commissions (if any). If you have any questions or concerns please contact Accounts Receivable at (780) 409-2481 or email at accounts.receivable@edmontonoilers.com.



ORIGINAL



W



Box 1480, Edmonton, Alberta, Canada, T5J 2N5
Phone (780) 471-7101 Fax (780) 471-7153

Invoice

EPCOR
Marlene Tasse
26th Floor EPCOR Tower
10423 - 101 Street NW
Edmonton, Alberta T5H 0E8

Invoice: 109284 12/06/12
Due: \$72,836.01 01/05/13
Account: 10171

Customer Copy

EPCOR Christmas Banquet 2012 (64390)

Start-End: Tue 11/27/12 - Sat 12/01/12

| Order | Description | Units | Rate | Charges |
|--------|--|--------------|--------------------|-------------|
| 179945 | Dinner | 1,070.00 PRS | \$53.00 / EA | \$56,710.00 |
| | Miscellaneous | 1.00 EA | 787.00 / EA | 787.00 |
| | Detail: Showtech Charges Lighting & Rigging for Firefly Theatre = \$376.00 Lighting for dance floor (6 x \$68.50) = \$411.00 | | | |
| | Total \$787.00 | | | |
| | Gratuities | 17.00 % | 59,587.00 100.00 / | 10,129.79 |
| | Miscellaneous | 1,070.00 EA | 1.00 / EA | 1,070.00 |
| | Detail: Complimentary Coat Check \$1.00/person based on final guarantee | | | |
| | Music Terriff Fee | 1.00 EA | 174.79 / EVT | 174.79 |
| | Bottled Water | 6.00 EA | 3.50 / EA | 21.00 |
| | Corkage | 238.00 PRS | 12.00 / EA | 2,856.00 |
| | Total For Order 179945: | | | \$71,748.58 |
| | Total Services: | | | \$71,748.58 |
| | | | | 3,587.43 |
| | Total Charges: | | | \$75,336.01 |

Previous Payments

07/20/12 Deposit-Visa V

Amount

\$-2,500.00

Invoice Summary

| | |
|-------------------|-------------|
| Total Services: | \$71,748.58 |
| Total Taxes: | \$3,587.43 |
| Total Charges: | \$75,336.01 |
| Total Payments: | \$-2,500.00 |
| Total Amount Due: | \$72,836.01 |

Gst Registration: R 101577443

Payment terms according to contract, otherwise net 30 days
from invoice date.

Method of Payment accepted:

| BU | RC | PRQJ | ACT | LOC | ACCT | INTERCO | AMOUNT |
|-------------------|----|------|-----|------|------|---------|-------------|
| Cash, Cheque, V/s | 40 | 727 | ✗ | 7350 | 90 | 5652 | ✗ 69,248.58 |
| | | | | | | | |
| | | | | | | | |

CEM722v3

CAN

USD

GST

Total

3,587.43

72,836.01

Prepared By:

Approved by:

(signature)
(Print name of Approver)

Date:

Dec. 11/12

Magrit Schick
Gillian Adams

Dec 7/12.

Attachment C



A-EWR-02

Preamble:

EPCOR bonus scheme primarily driven by profits, therefore the employees involved with proposing and managing the TWQM project are personally paid more by offloading costs to White Rock residents, and increasing EPCOR profits.

https://www.google.ca/url?sa=t&rct=j&q=&esrc=s&source=web&cd=3&cad=rja&sqi=2&ved=0CEUQFjAC&url=http%3A%2F%2Fsirepub.edmonton.ca%2Fsirepub%2Fview.aspx%3Fcabinet%3Dpublished_meetings%26fileid%3D113263&ei=FDQHUYjDMMXRigLApYGACA&usg=AFQjCNH9t3bZBohWid3vNFVRRfsVXj3PpQ&sig2=K7LikjIdD7p3yV_Xl5JxcA

Request:

How can the Comptroller ensure that its mandate "To assure that the customers of the utility receive acceptable water service at reasonable rates" is followed if EPCOR employees are paid more if profits are higher vs cost reduction or safety improvements?

Response:

EWR does not speak for the Comptroller, but EWR can speak to some of the issues raised in this information request in relation to EPCOR's incentive plan and how EWR is regulated.

Under EPCOR's incentive plan, incentive compensation is paid to staff when specified operational, safety and financial performance targets are met with the focus on operational and safety performance. For 2013, the incentive plan is comprised of the following components: a 60% weighting on operational performance targets including customer service, water quality and program delivery; a 30% weighting on safety performance targets; and a 10% weighting on targets related to meeting controllable expenses.

Another way that assurance will be gained that customers will receive acceptable water service at reasonable rates is through the Comptroller's regulatory process for filing and approving rates.



Under the Comptroller's process, EWR will be filing a revenue requirement and rate application in 2013 detailing the costs necessary to provide service to customers and these costs and the resulting rates to recover the costs will be tested through a number of steps as determined by the Comptroller. This typically includes detailed information requests to EWR from the Comptroller and registered intervenors and the filing of objections to the application. The Comptroller's process is an open process that ensures that EWR's costs and rates are reasonable and prudent.

**Bylaw 15816 – EPCOR Water Services and Wastewater Treatment Bylaw
EWSI Comments on Grant Thornton Report -
("EPCOR Water Services Inc – Review of 2012-2016 PBR Renewal")**

EPCOR Water Services Inc. (EWSI) has reviewed the Grant Thornton (GT) Report and provides the following comments on certain conclusions and recommendations outlined in the "Summary of findings" section of the report.

Water Consumption

GT Report Reference: Page 9 Subsection (b)

1. "Reduced average customer water consumption is assumed in the proposed rate structure. If such decreases do not materialize, then EWSI will generate revenue levels higher than those proposed without a corresponding increase in costs. Similarly, growth in customer count is assumed in the proposed rate structure. If growth exceeds the levels anticipated, then EWSI will generate revenue levels higher than those proposed. While costs are legitimately expected to increase, the marginal cost of servicing additional customers should not exceed the incremental revenues. We note that under the current PBR, no mechanisms are provided to ensure incremental revenues produced are held for the benefit of and/or redistributed to ratepayers."

EWSI Comments:

2. EWSI currently takes the risk on water consumption volumes as part of its Performance Based Regulation (PBR) framework. As noted by EWSI in its Rates Report, this risk is significant. Including a mechanism to pass this risk on to customers would significantly add to variability in customers rates on an annual basis and would reduce the rate predictability and stability provided under the current PBR structure.

3. There is as much risk of actual water consumption being lower than forecast as there is of it being higher. If such a mechanism is implemented, then both the benefit/cost of actual consumption being higher/lower than forecast would be passed on to EWSI's customers. It would not be appropriate to transfer the upside risk of consumption to customers with EWSI retaining the downside risk related to consumption. Water consumption is one of the many variables that determine EWSI's revenues and returns over the course of the 5-year PBR term. In the past, EWSI has achieved the approved returns by managing these variables.

4. Historical analysis of water demand has shown a long term continuous reduction in water use per customer. With the continued focus on water conservation in terms of education

program and rate structures, continued reduction in average water consumption is a reasonable expectation. A more significant risk would be that the new rate structure which promotes water conservation will result in even greater reduction in water use per customer than what has been forecasted in the PBR.

Capital Programs

GT Report Reference: Page 9 Subsection (c)

5. “By 2016, this level of capital spending will have increased the rate base for water operations by almost 32% when compared to the 2011 rate base based on total system. While a detailed analysis of the nature and relevance of individual capital project is beyond the scope of our engagement, best practices in other North American jurisdictions suggest that the City should participate in the investment appraisal process to ensure adequate financial regulatory oversight on capital spending, particularly to the extent such spending is in excess of amounts approved through this rate making process.”

EWSI Comments:

6. As noted in Attachment 1 of the Rates Report, one of the benefits of PBR is that it provides an efficient regulatory framework by avoiding costly annual reviews inherent in cost of service regulation. While EWSI is open to providing further information to City Council and for the benefit of City Administration to support its annual PBR Progress Reports, EWSI would be concerned about introducing a process that reduces the regulatory efficiency of a PBR framework without a clear benefit of the additional time and cost required.

7. EWSI considers that the existing PBR framework has worked well to define both the return and performance standards, both of which have been met in the past by EWSI. The current PBR structure also includes a process for the City to approve non-routine adjustments (NRAs) in accordance with the criteria provided in the Bylaw. EWSI has historically used NRAs for major, unanticipated deviations from its capital plan. Review of the NRAs application also considers the projected return on equity of EWSI over the 5 year PBR term.

8. It is also important to note that EPCOR Utilities Inc. (EUI) has significant internal controls governing capital spending, including EUI Board approval, Financial Review Council and the Water Capital Steering Committee. These processes provide significant oversight of the capital spending by EWSI.

Cost of Capital**GT Report Reference: Page 10 Subsection (d)**

9. “Compared to industry benchmarks, the cost of capital assumptions used by EWSI remain in the upper quartile. While EWSI is subject to commercial risks that may not be directly comparable to industry benchmarks, we note that the cost of capital assumptions used by EWSI continue to differ from the levels approved by the AUC for the RWCG.”

EWSI Comments:

10. EWSI considers that the proposed ROE is required for EWSI to maintain its financial sustainability over the long term, to ensure continued investment in utility infrastructure and to maintain its operations and services for the benefit of its customers. A cost of capital expert determined the fair ROE for EWSI of 10.875% based on an evaluation of EWSI’s business and financial risks compared to other utilities with similar risks and lines of business. These other utilities included a sample of US and Canadian gas, electric and water utilities.

11. While the proposed ROE is within the top quartile of allowed returns, EWSI considers this to be appropriate considering the risks associated with EWSI’s particular PBR framework compared to the risks faced by comparable utilities, including:

- Under a five year PBR term, there is higher forecast risk compared to shorter (e.g. 1, 2 or 3 year) cost of service applications;
- There are no deferral accounts included to pass on actual incurred costs to its customers for highly variable costs, such as chemicals, which can vary significantly with changes in raw water quality. Deferral accounts, common in AUC rate applications, reduce this risk to the utility;
- Average per customer water consumption reflect a declining trend and there is forecast risk of underestimating this decline;
- EWSI collects the majority of its water and wastewater treatment revenue from a consumption-based charge (75%), whereas electric and gas utilities will typically collect a higher proportion of their revenue through a fixed charge. This amplifies consumption risk significantly.

12. The rate of return on EWSI’s PBR is not directly comparable with that of the AUC approved rate of return established for the wholesale rates charged to EWSI’s regional water customers group (RWCG). Water rates for the RWCG are determined annually based on a cost of service regulation and there is a lower level of risk for the utility compared to the risks in

EWSI's PBR plan noted above. This difference in risks, and the resulting difference in rates of return required, is acknowledged on page 40 of the Grant Thornton Report.

Wastewater Revenues

GT Report Reference: Page 10 Subsection (d)

13. "As part of our review, we identified that revenues generated through the proposed rate structure exceeded the revenue requirements described in the wastewater information package by \$2.03 million over the term of PBR III. We understand that EWSI opted to adjust its revenue requirements through an acceleration of the phasing of annual ROE increases. While we emphasize this does not impact the proposed wastewater rate structure, we note that the adjustment could also have been implemented through a reduction in the wastewater rate structure."

EWSI Comments:

14. EWSI's had three objectives in determining the annual forecast level of returns for wastewater operations: (i) not to exceed annual rate increases of 8.0% per year in order to minimize the customer bill impact; (ii) to support a gradual increase in the ROE to 10.875% by the end of 2016 and (iii) to maintain the recommended capital structure of 60% debt and 40% equity. In meeting these three objectives, EWSI accepted a significantly lower average rate return on equity over the 5-year PBR term in comparison to the fair return.

15. As noted above, through the course of reviewing the revenue requirements, it was identified that a correction to EWSI's interest expense and equity return for wastewater operations was required to maintain the recommended capital structure of 60% debt and 40% equity. The correction required a downward adjustment to the forecast interest expenses and an upward adjustment to the equity returns for EWSI's wastewater operations in order to maintain its capital structure over the 5-year PBR term. The impact of these adjustments resulted in an update to EWSI's average annual return on equity to 7.8% compared to its original forecast of 6.6% for the 5-year PBR term.

16. With EWSI's average annual return on equity projected to be 7.8%, it still remains significantly below the recommended level of a fair return for the wastewater utility of 10.875%. Therefore, EWSI considers that its approach to this correction is reasonable and appropriate.

Inflation Adjustment**GT Report Reference: Page 11 Subsection (e)**

17. “We note that the proposed changes to the annual inflation adjustment mechanism to the water and wastewater rate-structure will result in a more transparent rate adjustment mechanism based on the reliance towards independently verifiable data sources. We also note that over the term of PBR III and compared to the adjustment mechanism under PBR II, there will be a lesser correlation in rate increases to CPI given the proposed weighting changes which increase the relative importance of labour costs.”

EWSI Comments:

18. EWSI has proposed a rate of inflation measured by a weighted average of two components: (i) 65% based on the change in the Consumer Price Index for Alberta and (ii) 35% based on the change in the Average Hourly Earnings (AHE) for Alberta, Industrial Aggregate. The revised weighting of the CPI and Labour components reflects a determination that approximately 70% of corporate service cost allocations relate to salaries and benefits. Based on this, approximately 65% of operating costs are driven by general inflation and 35% are driven by wage and salary inflation. While the component of the inflation factor that is based on Alberta CPI has been reduced from 79% in PBR II to 65% in PBR III, EWSI considers this to be an appropriate reflection of the proportion of its labour costs and other costs.

19. The Alberta AHE Industrial Aggregate series is comprised of multi-industries across Alberta and includes the oil and gas industry as well as several other industries of substantial size (i.e. health care). Therefore, the AHE index is broadly based and is not overly influenced by any particular industry. EWSI competes for talent across a number of industries and therefore, a broadly based index such as the AHE index is appropriate for use as the salary escalation factor for the 2012-2016 PBR. AHE is readily available and verifiable and reflects the geographic market that EWSI is primarily drawing its resources from.

Efficiency Factor**GT Report Reference: Page 11 Subsection (e)**

20. “We note that the proposed annual rate adjustment calculation continues to feature a proposed efficiency factor of 0.25%. We echo the conclusions from the independent review of PBR II that the proposed factor is modest in comparison to the industry. Given the prior year increases in operating costs as well as the extent of the capital program contemplated under PBR

III, a higher efficiency factor could be justified to ensure a strong incentive to reduce and control operating and capital costs.”

EWSI Comments:

21. EWSI considers that its proposed 0.25% efficiency factor is appropriate given this is the third renewal of its PBR. With each successive 5-year term, it becomes increasingly difficult for utilities to find additional cost savings beyond those already achieved in prior PBR periods. Under the Bylaw, if the actual inflation rate is 1.75% or lower, no efficiency factor will be applied.

22. EWSI's PBR structure is based on prices for chemicals, power and other inputs increasing at the level of inflation. If prices for these inputs increase at levels greater than inflation, EWSI will need to find additional cost savings to offset these price increases and still maintain its proposed rate of return. Refer to EWSI's further comments below on the “Incentives to Innovate”.

23. EWSI retained an independent expert, Dr. David Ryan, a Professor with the University of Alberta's Economics Department, to recommend a productivity factor for EWSI's 2012-2016 PBR. Dr. Ryan's analysis and conclusions were provided to Grant Thornton. In Dr. Ryan's report, he concludes “that the most reasonable forecast of productivity growth in the utility industry in Alberta for the next several years is that it will be zero”. However, to demonstrate a continuing commitment to its customers to increase operational efficiencies, EWSI proposes to continue to with an efficiency factor of 0.25% for the 2012-2016 PBR.

Operating Costs**GT Report Reference: Page 11 Subsection (e)**

24. “Consistent with our finding with respect to capital projects, we note that the City, as regulator, should contemplate an enhanced level of disclosure by EWSI over the term of PBR III with respect to its financial performance with a detailed analysis of variances between actual and forecasted values. As a further step to mitigate future cost increases, the City should contemplate mechanisms which would require prior approval of incremental expenditures before they get aggregated in the revenue requirements.”

EWSI Comments:

25. The recommendations to provide "...enhanced level of disclosure over the term with respect to financial performance..." and "...mechanisms which would require prior approval of incremental expenditures before they get aggregated..." suggest a move back to cost of service regulation. As noted in its comments above regarding "Capital Programs" oversight process, EWSI is concerned about eroding the benefits of a PBR mechanism by introducing processes that reduce regulatory efficiency. EWSI is submitting for City Council approval its plan as part of its 5-year PBR Bylaw; having additional process for approvals during the five year term could create duplication of effort and process. EWSI considers that a PBR framework should allow the utility the ability to make operating cost decisions to balance off performance standards and return on equity considerations. The test as to whether EWSI's operating decisions are appropriate lies in past performance history, the returns achieved and the resulting water rates which are reasonable relative to other comparable cities.

Performance Indices**GT Report Reference: Page 11 Subsection (f)**

26. The use of indices which are based on the aggregated value of a basket of individual measures dilutes the relative importance of each index and fails to properly account for the criticality of some measures. This is especially relevant in the context where not all measures share the same relative importance and where performance on individual measures are mitigated or averaged. For selected measures that impact critical activities, consideration should be given to creating individual thresholds to ensure minimum performance is consistently achieved.

EWSI Comments:

27. EWSI considers all the performance measures – system reliability, water quality, customer service, environmental and safety performance – to be of comparable importance to ensure a well functioning water and wastewater system. Therefore, energy and attention is applied to all of these five areas as a matter of sound utility management. Further, the existing performance measures have served the City well, as indicated by the relatively positive customer survey results. As a result, EWSI does not see the need to have additional individual measures added to the performance measures.

28. Although EWSI's individual performance measures are grouped for penalty calculations they are reported on individually to City Council and specific initiatives to address missed

performance are followed up on with new initiatives and reported back to City Council in the annual PBR Progress Reports.

Wastewater Customer Service

GT Report Reference: Page 12 Subsection (f)

29. Under the customer services index for wastewater treatment, the measure of number of meetings held may not result in a meaningful measure which reflects customer service nor provide an opportunity to monitor and track improvements. A possible variation to this index could be to measure the ratio of “number of open items during the meetings over the number of items closed within the targeted period”. So independently of the number of meetings, EWSI would measure the pro-activeness in responding to the community liaison committee open issues. Other variations to this measure could also be considered.

EWSI Comments:

30. The intent of this measure is to ensure that Gold Bar Wastewater Treatment plant management continues to engage with the Gold Bar community, as has been the case since the plant was owned by the City. Because of major changes to Gold Bar’s operations (e.g. Enhanced Primary Treatment) and the lack of historical data with both the new operational configuration and operation of the plant by EWSI, a simple engagement measure was deemed appropriate. Having said that, EWSI will consider alternatives to this measure for discussion with the City.

Biosolids and Supernatant Management

GT Report Reference: Page 12 Subsection (f)

31. “Furthermore, given the relationship between the City’s Drainage Branch and the Gold Bar wastewater treatment plant on biosolids management, it would appear that the development of performance measures around biosolids production and supernatant management would be warranted.”

EWSI Comments:

32. A mechanism already exists for direct and collaborative interface between Gold Bar Wastewater Treatment Plant and the City’s Drainage Branch, in the form of the Gold Bar Management Committee. This Committee, which includes both senior EWSI and City staff, has mandate to jointly manage the interface points between the Wastewater Treatment Plant and the

Drainage Branch. This structure also includes a subcommittee, the Edmonton Biosolids Regional Partnership responsible for the biosolids and supernatant management activities.

Incentive to Innovate

GT Report Reference: Page 12 Subsection (g)

33. “From a financial perspective there is limited incentive for EPCOR to innovate and thus reduce the cost of service delivery to rate payers. The current model is effectively a blend of PBR for service quality related elements and traditional return on rate base for the financial component. To create a full PBR system and incent cost reduction for ratepayers, there has to be an incentive (for EWSI) to innovate and drive down the cost of service delivery. The current efficiency factor is not an incentive for EPCOR to be innovative and more efficient. Based on the current regulatory model, we have made recommendations above to create greater oversight in financial decision making regarding capital and operating matters. Should the rate structure evolve towards more of a full PBR model with incentives for reducing costs to ratepayers, then these oversight mechanisms can be withdrawn.”

EWSI Comments:

34. EWSI notes that there are several ways, other than through the efficiency factor, in which EWSI is incented to innovate and find cost savings. These other incentives stem from PBR III revenue requirement and rates which reflect forecast increases in its input prices held at the level of inflation.

35. While EWSI's forecast revenue requirement for 2012-2016 reflects increases in certain costs above inflation, these are only related to higher volume/activity levels (driven by regulatory, reliability, City of Edmonton requirements, etc.) and all input prices are assumed to increase based on the inflation rate (as measured by CPI and AHE). Therefore, EWSI retains the risk associated with input prices for capital and operating costs rising above inflation and is driven to find cost savings to offset any increases in input prices above inflation.

36. EWSI considers that there is a high probability of certain key input prices rising above inflation which will result in strong incentives to find offsetting cost savings, for instance:

- Chemical prices
- Power prices – Under PBR III, power prices are forecast to increase at CPI. However, EWSI has a power price contract for the next five years based on power prices increasing at rates much higher than forecast CPI.

- Interest rates – Under PBR III, the cost of new debt is forecast to be 5.89%, which is based on the 2012 forecast held constant for the 5-year period. EWSI will need to mitigate the impacts of higher than forecast interest rates.
- Construction materials costs – If Alberta faces another construction boom in the next 5-year period, EWSI could face rapidly increasing materials costs at level above CPI.

37. Another way EWSI is incented to find cost savings is if there is a significant reduction in water consumption compared to EWSI's forecast. This occurred during PBR II and caused EWSI to have to manage a significant reduction in revenues relative to forecast.

Attachment D

White Rock thirsts for control of municipal water supply

[CBC News](#) Posted: Jun 12, 2013 12:17 PM PT Last Updated: Jun 12, 2013 2:30 PM PT

White Rock city councillors have voted unanimously to try to buy the municipality's water system from the private corporation that owns it.

City councillors voted on Monday to enter into negotiations to buy the city's water assets from Epcor, a company run by the City of Edmonton.

Mayor Wayne Baldwin says the decision was based purely on its financial model. White Rock is one of the only cities in the province that doesn't own its water supply.

"We're looking at doing something that's in the best interest of the taxpayers with respect to their money."

Former city councillor Margaret Woods, who led the push to buy back the water supply, says it make financial sense.

"Why should the taxpayers pay the City of Edmonton for their water? You're making the profits of one community for the benefit of another community."

- [Read more about the White Rock Accountable Water Committee's campaign](#)

Earlier this year, Epcor announced upgrades to comply with Fraser Health standards by 2016 would cost up to \$22 million.

Woods says the city can now explore other solutions instead of financing those expensive upgrades.

"Rather than spending \$22 million, there are other options, and one of the options was to join the Metro Vancouver system."

But council will have to decide quickly what it wants to do. The city has until Monday to submit a decision to the province's Comptroller of Water Rights.

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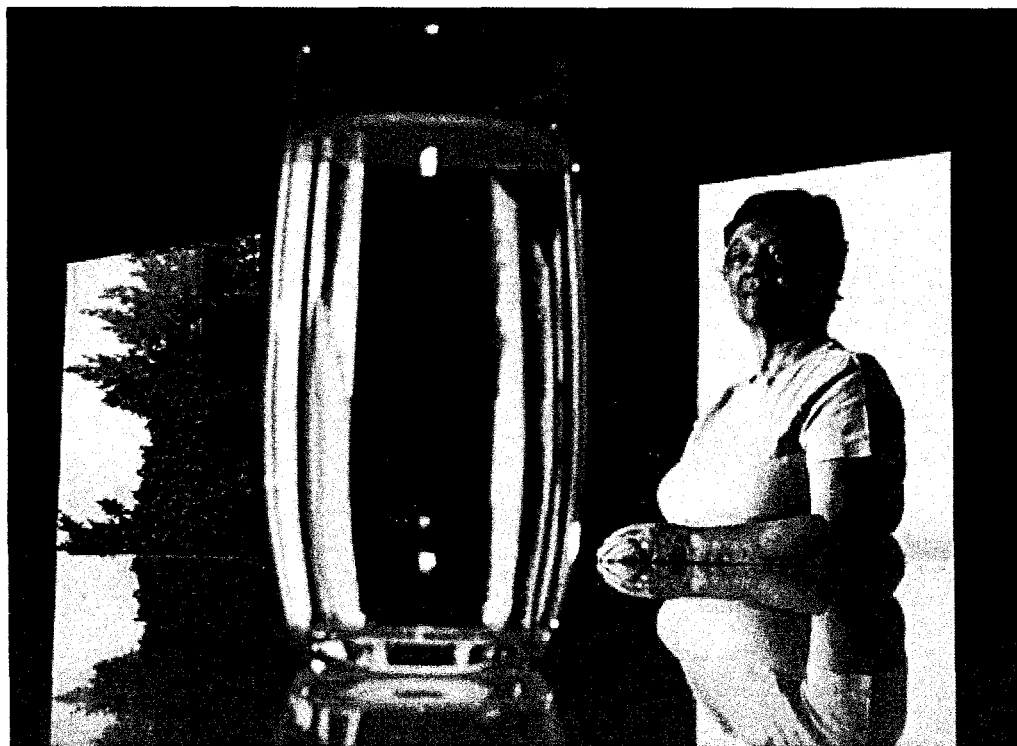
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Former councillor urges White Rock to buy water utility

Christopher Poon / Surrey Now

May 30, 2013 01:00 AM



Former White Rock councillor Margaret Woods would like the city to purchase its own water supply, saying it's wrong for Edmonton-based EPCOR to make money off of taxpayers. Photograph by: Kevin Hill

Former White Rock councillor Margaret Woods would like the city to purchase its own water supply, saying it's wrong for Edmonton-based EPCOR to make money off of taxpayers. Photograph by: Kevin Hill

With White Rock council expected to receive a staff report in the coming weeks on the possibility of the city purchasing its own water utility, one resident stood before council Monday urging it to "do the right thing" and go ahead with the purchase.

On behalf of the White Rock Accountable Water Committee, former city councillor Margaret Woods made the case that the city should take the plunge and purchase its own water supply from Edmonton-based EPCOR rather than allowing the company to move forward with its proposed upgrading of the utility.

Earlier this year, EPCOR announced plans to upgrade the city's water supply in two phases, which will come at a combined cost of \$22 million.

The first phase will include the chlorination of the water supply by 2016, while the second would include arsenic and manganese treatment. The cost will be \$12 million and \$10 million respectively.

However, Woods argued that if the taxpayers of White Rock are going to be spending so much anyway, now is the time for the city to purchase its own water supply. She said as it stands, the City of Edmonton is essentially making money off of White Rock's water system, as EPCOR pays an annual dividend to the Albertan city.

"The residents of White Rock contribute to that dividend," said Woods. "It collects over \$2 million (a year) from residents and businesses of White Rock. So if the city doesn't buy (the utility) the people will pay over \$22 million with nothing to show."

Woods also noted that if the city did end up purchasing the water supply, it could look into hooking up with the GVRD water system, which already has the arsenic and manganese treatment in place, which could save the city \$10 million.

"It's going to cost us one way or another... so doesn't it make sense for the City of White Rock to make the money, not Edmonton?" said Woods. "Let's do it today. For the people here, and future generations."

Council is expected to hear staff recommendations at the June 10 council meeting. cpoon@thenownewspaper.com

Twitter @questionchris

© Surrey Now

Attachment E

Line

No. Annualize Year End Revenue - Residential:

| | Residential | | | | |
|--|-------------|-------------|------------|------------|-----------------|
| | 5/8 x 3/4" | 1" | 1-1/2" | 2" | 3" |
| 1 | | | | | |
| 2 | | | | | |
| 3 | | | | | |
| 4 | | | | | |
| 5 <u>Customer Growth Statistics</u> | | | | | |
| 6 From Schedule H-2 | | | | | |
| 7 Average Customers | 8,308 | 4,327 | 25 | 38 | 2 |
| 8 Average Monthly Gallons | 7,870 | 10,780 | 33,407 | 71,775 | 82,636 |
| 9 | | | | | |
| 10 Actual TYE Bills | 8,331 | 4,351 | 25 | 38 | 2 |
| 11 Mo Customer Growth Bills | 23 | 24 | 0 | 0 | 0 |
| 12 (Line 10 - Line 7) | | | | | |
| 13 | | | | | |
| 14 Mo Cust Growth Volumes (1,000 gals) | 181 | 259 | - | - | - |
| 15 (Line 11 x Line 8 / 1,000) | | | | | |
| 16 | | | | | |
| 17 | | | | | |
| 18 | | | | | |
| 19 <u>Customer Growth Revenue:</u> | | | | | |
| 20 Meter Charge | \$ 16.50 | \$ 27.50 | \$55.00 | \$ 88.00 | \$ 176.00 |
| 21 Volumetric - 1st block limit | 3,000 | 24,000 | 60,000 | 100,000 | 225,000 |
| 22 1st block rate | \$2.3100 | \$2.9600 | \$2.9600 | \$2.9600 | \$2.9600 |
| 23 2nd block limit | 9,000 | infinite | infinite | infinite | infinite |
| 24 2nd block rate | \$2.9600 | \$3.6100 | \$3.6100 | \$3.6100 | \$3.6100 |
| 25 3rd block rate | \$3.6100 | | | | |
| 26 | | | | | |
| 27 Annual Revenue per Additional Bill | \$454.14 | \$712.92 | \$1,846.56 | \$3,605.40 | \$5,047.20 |
| 28 times Customer Growth Bills (Line 11) | \$10,445.28 | \$17,110.08 | \$0.00 | \$0.00 | \$0.00 |
| 29 | | | | | |
| 30 Total Residential | | | | | <u>\$27,555</u> |

Line

No. Annualize Year End Revenue - Commercial:

| | Commercial | | | | | | |
|--|------------|------------|------------|------------------|------------|-------------|----------------|
| | 5/8 x 3/4" | 1" | 1-1/2" | 2" | 3" | 4" | 6" |
| 5 <u>Customer Growth Statistics</u> | | | | | | | |
| 6 From Schedule H-2 | | | | | | | |
| 7 Average Customers | 118 | 144 | 67 | 65 | 3 | 4 | 2 |
| 8 Average Monthly Gallons | 9,645 | 14,836 | 36,607 | 63,293 | 73,585 | 188,750 | 360,667 |
| 9 | | | | | | | |
| 10 Actual TYE Bills | 120 | 143 | 70 | 66 | 3 | 4 | 2 |
| 11 Mo Customer Growth Bills | 2 | (1) | 3 | 1 | 0 | 0 | 0 |
| 12 (Line 10 - Line 7) | | | | | | | |
| 13 | | | | | | | |
| 14 Mo Cust Growth Volumes (1,000 gals) | 19 | (15) | 110 | 63 | - | - | - |
| 15 (Line 11 x Line 8 / 1,000) | | | | | | | |
| 16 | | | | | | | |
| 17 | | | | | | | |
| 18 | | | | | | | |
| 19 <u>Customer Growth Revenue:</u> | | | | | | | |
| 20 Meter Charge | \$ 16.50 | \$ 27.50 | \$ 55.00 | \$ 88.00 | \$ 176.00 | \$ 275.00 | \$ 550.00 |
| 21 Volumetric - 1st block limit | 9,000 | 24,000 | 60,000 | 100,000 | 225,000 | 350,000 | 725,000 |
| 22 1st block rate | \$2.9600 | \$2.9600 | \$2.9600 | \$2.9600 | \$2.9600 | \$2.9600 | \$2.9600 |
| 23 2nd block limit | infinite | infinite | infinite | infinite | infinite | infinite | infinite |
| 24 2nd block rate | \$3.6100 | \$3.6100 | \$3.6100 | \$3.6100 | \$3.6100 | \$3.6100 | \$3.6100 |
| 25 | | | | | | | |
| 26 | | | | | | | |
| 27 Annual Revenue per Additional Bill | \$545.62 | \$856.92 | \$1,960.32 | \$3,304.20 | \$4,725.72 | \$10,004.40 | \$19,410.84 |
| 28 times Customer Growth Bills (Line 11) | \$1,091.24 | (\$856.92) | \$5,880.96 | \$3,304.20 | \$0.00 | \$0.00 | \$0.00 |
| 29 | | | | | | | |
| 30 Total Commercial | | | | Total Commercial | | | <u>\$9,419</u> |

Attachment F

| Line No. | Reconcile Chaparral City Water's Plant to Amounts Previously Approved | | | Approved in Dec | | Approved Dec. 71309 December 2006 TY | Reverse CAP Allocation (MEM Adj #2) | Reverse MEM (Adj #6) Capitalize Expenses | Reverse Retire Wells (MEM Adj #7) | Plant in Service December 2006 Before GRC Adj's |
|----------|---|---------|--------------------------------------|----------------------|---------------|--------------------------------------|-------------------------------------|--|-----------------------------------|---|
| | | | | No. 71308 (10/21/09) | | | | | | |
| | | | | Annual Depr. | Monthly Depr. | | | | | |
| G/L | Sub. | Account | Description | Rate | Rate | | | | | |
| 6 | | 301 | Organization | 0.00% | 0.00% | | | | | |
| 7 | | 302 | Franchises | 0.00% | 0.00% | | | | | |
| 8 | | 303 | Land and Land Rights | 0.00% | 0.00% | 1,551,858 | (1,280,000) | 34,062 | | 305,919 |
| 9 | | 304 | Structures & Improvements | 3.33% | 0.28% | 1,529,642 | | 596 | | 1,518,648 |
| 10 | | 305 | Collecting and Impounding Reservoirs | 2.50% | 0.21% | - | | 6,548 | | 6,548 |
| 11 | | 306 | Lakes, Rivers, Other Intakes | 2.50% | 0.21% | - | | - | | - |
| 12 | | 307 | Wells | 3.33% | 0.28% | 159,627 | | 172,438 | | 332,065 |
| 13 | | 308 | Infiltration Galleries & Tunnels | 6.67% | 0.56% | - | | - | | - |
| 14 | | 309 | Supply Mains | 2.00% | 0.17% | - | | - | | - |
| 15 | | 310 | Power Generation Equipment | 5.00% | 0.42% | - | | - | | - |
| 16 | | 311 | Pumping Equipment | 12.50% | 1.04% | 1,588,246 | | (55,254) | | 1,483,614 |
| 17 | | 320 | Water Treatment Plant | 3.33% | 0.28% | 5,786,640 | | 1,976,860 | | 7,757,814 |
| 18 | | 330 | Distribution Reservoirs & Standpipes | 2.22% | 0.19% | 6,512,148 | | 1,658,272 | | 8,170,420 |
| 19 | | 331 | Transmission & Distribution Mains | 2.00% | 0.17% | 18,953,054 | | (1,502,420) | | 17,450,634 |
| 20 | | 333 | Services | 3.33% | 0.28% | 7,496,339 | | (106,409) | | 7,389,930 |
| 21 | | 334 | Meters & Meter Installation | 8.33% | 0.69% | 2,736,866 | | (11,193) | | 2,722,117 |
| 22 | | 335 | Hydrants | 2.00% | 0.17% | 1,224,985 | | (53,352) | | 1,171,633 |
| 23 | | 336 | Backflow Prevention Devices | 0.00% | 0.00% | - | | - | | - |
| 24 | | 339 | Other Plant & Misc. Equipment | 6.67% | 0.56% | 1,717,229 | | (106,542) | | 1,610,687 |
| 25 | | 340 | Office Furniture & Equipment | 6.67% | 0.56% | 272,173 | | (1,814) | | 270,359 |
| 26 | | 341 | Transportation Equipment | 20.00% | 1.67% | 535,315 | | - | | 535,315 |
| 27 | | 342 | Stores Equipment | 4.00% | 0.33% | - | | - | | - |
| 28 | | 343 | Tools, Ship & Garage Equipment | 5.00% | 0.42% | 149,365 | | - | | 149,365 |
| 29 | | 344 | Laboratory Equipment | 10.00% | 0.83% | - | | - | | - |
| 30 | | 345 | Power Operated Equipment | 5.00% | 0.42% | - | | - | | - |
| 31 | | 346 | Communication Equipment | 10.00% | 0.83% | 39,105 | | - | | 39,105 |
| 32 | | 347 | Miscellaneous Equipment | 10.00% | 0.83% | - | | (106,542) | | 106,542 |
| 33 | | 348 | Other Tangible Plant | 10.00% | 0.83% | - | | - | | - |
| 34 | | | Subtotal | | | 50,252,592 | (1,280,000) | 2,118,334 | | 51,020,715 |
| 35 | | | General Office Plant Allocation | | | 875,470 | | | | |
| 36 | | | Total Authorized Plant in Service | | | 51,128,062 | | | | |
| 37 | | | | | | | | | | |
| 38 | | | | | | | | | | |
| 39 | | | | | | | | | | |
| 40 | | | | | | | | | | |
| 41 | | | | | | | | | | |
| 42 | | | | | | | | | | |

ACC Annual Report

Difference

(1)

Adjusted to Annual Report

Chaparral City Water Company

Test Year Ended December 31, 2012

Plant in Service Reconciliation

| Line No. | Reconcile Chaparral City Water's Plant to Amounts Previously Approved | G/L Account | Sub. Account | Description | Additions 2007 | Retirements 2007 | Adjustments 2007 | Balance December 2007 | 2007 ACC Annual Report | Difference |
|----------|---|-------------|--------------|-------------|----------------|------------------|------------------|-----------------------|------------------------|------------|
| 301 | Organization | | | | | | | \$ - | \$ - | \$ - |
| 302 | Franchises | | | | | | | - | - | - |
| 303 | Land and Land Rights | | | | 1,282,733.63 | | | 1,588,653 | 1,588,654 | 1 |
| 304 | Structures & Improvements | | | | 26,359.16 | | | 1,545,007 | 1,545,008 | 1 |
| 305 | Collecting and Impounding Reservoirs | | | | | | | 6,548 | - | (6,548) |
| 306 | Lakes, Rivers, Other Intakes | | | | | | | - | - | - |
| 307 | Wells | | | | | | | 332,065 | 332,065 | - |
| 308 | Infiltration Galleries & Tunnels | | | | | | | - | - | - |
| 309 | Supply Mains | | | | | | | - | - | - |
| 310 | Power Generation Equipment | | | | | | | - | - | - |
| 311 | Pumping Equipment | | | | 1,211,840.14 | | | 2,695,454 | 2,695,454 | (0) |
| 320 | Water Treatment Plant | | | | 389,983.20 | 1,072.24 | | 8,146,725 | 8,146,725 | 0 |
| 330 | Distribution Reservoirs & Standpipes | | | | 1,688,598.76 | 5,419.85 | | 9,853,599 | 9,860,147 | 6,548 |
| 331 | Transmission & Distribution Mains | | | | 2,040,825.43 | 20,187.59 | | 19,471,272 | 19,471,272 | 0 |
| 333 | Services | | | | 888,035.07 | | | 8,277,965 | 8,277,965 | (0) |
| 334 | Meters & Meter Installation | | | | | | | 2,722,117 | 2,722,117 | - |
| 335 | Hydrants | | | | 298,183.91 | | | 1,469,817 | 1,469,817 | 0 |
| 336 | Backflow Prevention Devices | | | | | | | - | - | - |
| 339 | Other Plant & Misc. Equipment | | | | | | | 1,610,687 | 1,940,072 | 329,385 |
| 340 | Office Furniture & Equipment | | | | 12,057.66 | 5,199.01 | | 277,218 | 277,217 | (1) |
| 341 | Transportation Equipment | | | | 65,258.23 | 55,374.77 | | 545,198 | 545,199 | 1 |
| 342 | Stores Equipment | | | | | | | - | - | - |
| 343 | Tools, Ship & Garage Equipment | | | | 6,950.37 | 6,860.02 | | 149,455 | 149,456 | 1 |
| 344 | Laboratory Equipment | | | | | | | - | - | - |
| 345 | Power Operated Equipment | | | | 788.50 | | | 789 | 789 | 1 |
| 346 | Communication Equipment | | | | 4,221.85 | | | 43,327 | 43,326 | (1) |
| 347 | Miscellaneous Equipment | | | | 222,843.40 | | | 329,385 | - | (329,385) |
| 348 | Other Tangible Plant | | | | | | | - | - | - |
| | Subtotal | | | | 8,138,679 | 94,113 | - | 59,065,281 | 59,065,283 | 2 |
| | General Office Plant Allocation | | | | | | | | | |
| | Total Authorized Plant in Service | | | | | | | | 59,065,283 | 2 |
| | | | | | | | | 59,065,283 | | |
| | | | | | | | | 2 | | |

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Supporting Workpaper

Schedule B-2

Page 2

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Chaparral City Water Company

Test Year Ended December 31, 2012

Plant in Service Reconciliation

| Line No. | Reconcile Chaparral City Water's Plant to Amounts Previously Approved | G/L Account | Sub. Account | Description | Additions 2009 | Retirements 2009 | Adjustments 2009 | Ending Balance December 2009 | 2009 ACC Annual Report | Difference |
|----------|---|-------------|--------------|-------------|----------------|------------------|------------------|------------------------------|------------------------|-------------|
| 301 | Organization | | | | | | | | | \$ - |
| 302 | Franchises | | | | | | | | | - |
| 303 | Land and Land Rights | | | | | | 34,063.34 | 1,554,589 | 1,554,591 | 2 |
| 304 | Structures & Improvements | | | | | | | 1,722,612 | 1,722,612 | 0 |
| 305 | Collecting and Impounding Reservoirs | | | | 17,599.98 | | | 6,548 | - | (6,548) |
| 306 | Lakes, Rivers, Other Intakes | | | | | | | - | - | - |
| 307 | Wells | | | | | 106,816.30 | 65,621.56 | 159,627 | 159,627 | (0) |
| 308 | Infiltration Galleries & Tunnels | | | | | | | - | - | - |
| 309 | Supply Mains | | | | | | | - | - | - |
| 310 | Power Generation Equipment | | | | | | | - | - | - |
| 311 | Pumping Equipment | | | | 468,725.07 | 20,955.33 | (55,253.28) | 3,975,824 | 5,793,460 | 1,817,636 |
| 320 | Water Treatment Plant | | | | 226,943.76 | 2,012,183.41 | (34,063.34) | 6,434,223 | 6,434,223 | 0 |
| 330 | Distribution Reservoirs & Standpipes | | | | | | 1,660,938.99 | 8,196,473 | 8,203,020 | 6,547 |
| 331 | Transmission & Distribution Mains | | | | 832,027.17 | 3,831.50 | (1,498,539.53) | 23,566,190 | 23,566,190 | 0 |
| 333 | Services | | | | 718,240.27 | 114,215.00 | (89,658.84) | 10,010,062 | 10,010,062 | (0) |
| 334 | Meters & Meter Installation | | | | 21,977.21 | | (11,192.82) | 2,874,283 | 2,874,282 | (1) |
| 335 | Hydrants | | | | 203,025.75 | 49,579.86 | (42,305.11) | 1,903,595 | 1,903,594 | (1) |
| 336 | Backflow Prevention Devices | | | | | | | - | - | - |
| 339 | Other Plant & Misc. Equipment | | | | | | | 1,610,687 | 134,744 | (1,475,943) |
| 340 | Office Furniture & Equipment | | | | 3,782.15 | 2,266.26 | (1,814.00) | 280,380 | 280,379 | (1) |
| 341 | Transportation Equipment | | | | | | | 547,935 | 547,936 | 1 |
| 342 | Stores Equipment | | | | | | | - | - | - |
| 343 | Tools, Ship & Garage Equipment | | | | | | | 151,351 | 169,747 | 18,396 |
| 344 | Laboratory Equipment | | | | | | | - | - | - |
| 345 | Power Operated Equipment | | | | | | | 18,396 | - | (18,396) |
| 346 | Communication Equipment | | | | | | | 43,327 | 43,327 | 0 |
| 347 | Miscellaneous Equipment | | | | 12,307.23 | | | 341,693 | - | (341,693) |
| 348 | Other Tangible Plant | | | | | | | - | - | - |
| | Subtotal | | | | 2,504,629 | 2,309,848 | 27,797 | 63,397,793 | 63,397,794 | 1 |
| | General Office Plant Allocation | | | | | | | | | |
| | Total Authorized Plant in Service | | | | 2,504,629 | 2,309,848 | 27,797 | 63,397,793 | 63,397,794 | 1 |
| | | | | | | | | | 63,397,794 | |

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Chaparral City Water Company

Test Year Ended December 31, 2012

Plant in Service Reconciliation

Supporting Worksheet

Schedule B-2

Page 3

Witness: Hubbard

| Line No. | Reconcile Chaparral City Water's Plant to Amounts Previously Approved | G/L Account | Sub. Account | Description | Additions 2010 | Retirements 2010 | Adjustments 2010 | Ending Balance December 2010 | 2010 ACC Annual Report | Difference |
|----------|---|-------------|--------------|-------------|----------------|------------------|------------------|------------------------------|------------------------|-------------|
| 301 | Organization | | | | | | | \$ - | \$ - | |
| 302 | Franchises | | | | | | | - | - | |
| 303 | Land and Land Rights | | | | | | | 1,554,589 | 1,554,591 | 2 |
| 304 | Structures & Improvements | | | | | | | 1,722,612 | 1,722,612 | 0 |
| 305 | Collecting and Impounding Reservoirs | | | | | | | 6,548 | - | (6,548) |
| 306 | Lakes, Rivers, Other Intakes | | | | | | | - | - | |
| 307 | Wells | | | | | | | 159,627 | 159,627 | (0) |
| 308 | Infiltration Galleries & Tunnels | | | | | | | - | - | |
| 309 | Supply Mains | | | | | | | - | - | |
| 310 | Power Generation Equipment | | | | | | | - | - | |
| 311 | Pumping Equipment | | | | | | | 3,975,824 | 5,801,210 | 1,825,386 |
| 320 | Water Treatment Plant | | | | | | | 6,434,223 | 6,434,223 | 0 |
| 330 | Distribution Reservoirs & Standpipes | | | | | | | 8,196,473 | 8,203,020 | 6,547 |
| 331 | Transmission & Distribution Mains | | | | 16,339.50 | 916.04 | | 23,581,613 | 23,581,613 | (0) |
| 333 | Services | | | | 408,787.74 | 144,043.22 | | 10,274,807 | 10,274,807 | (0) |
| 334 | Meters & Meter Installation | | | | | | | 2,874,283 | 2,874,282 | (1) |
| 335 | Hydrants | | | | 45,929.60 | 1,744.00 | | 1,947,780 | 1,947,780 | (0) |
| 336 | Backflow Prevention Devices | | | | | | | - | - | |
| 339 | Other Plant & Misc. Equipment | | | | | | | 1,610,687 | 165,737 | (1,444,950) |
| 340 | Office Furniture & Equipment | | | | | | (1.31) | 280,381 | 280,380 | (1) |
| 341 | Transportation Equipment | | | | | | 33,030.63 | 514,905 | 514,905 | 0 |
| 342 | Stores Equipment | | | | | | | - | - | |
| 343 | Tools, Ship & Garage Equipment | | | | | | | 151,351 | 169,747 | 18,396 |
| 344 | Laboratory Equipment | | | | | | | - | - | |
| 345 | Power Operated Equipment | | | | | | | 18,396 | - | (18,396) |
| 346 | Communication Equipment | | | | | | | 43,327 | 43,327 | 0 |
| 347 | Miscellaneous Equipment | | | | 38,742.76 | | | 380,435 | - | (380,435) |
| 348 | Other Tangible Plant | | | | | | | - | - | |
| | Subtotal | | | | 509,800 | 146,703 | 33,029 | 63,727,860 | 63,727,861 | 1 |
| | General Office Plant Allocation | | | | | | | | | |
| | Total Authorized Plant in Service | | | | 509,800 | 146,703 | 33,029 | 63,727,860 | 63,727,861 | 1 |
| | | | | | | | | | 63,727,861 | |

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Plant in Service Reconciliation

42

Chaparral City Water Company

Test Year Ended December 31, 2012

Plant in Service Reconciliation

Supporting Worksheet

Schedule B-2

Page 4

Witness: Hubbard

| Line No. | No. | Reconcile Chaparral City Water's Plant to Amounts Previously Approved | G/L Account | Sub. Account | Description | Additions 2012 | Retirements 2012 | Adjustments 2012 | Ending Balance December 2012 | 2012 ACC Annual Report | Difference |
|----------|-----|---|-------------|--------------|-------------|----------------|------------------|------------------|------------------------------|------------------------|-------------|
| 6 | 301 | Organization | | | | | | | \$ - | \$ - | |
| 7 | 302 | Franchises | | | | | | | 0 | | |
| 8 | 303 | Land and Land Rights | | | | | | | 1,554,589 | 1,554,591 | 2 |
| 9 | 304 | Structures & Improvements | | | | 47,408 | | | 1,795,905 | 1,779,391 | (16,514) |
| 10 | 305 | Collecting and Impounding Reservoirs | | | | 6,970 | | | 13,518 | 1,013,959 | 1,000,441 |
| 11 | 306 | Lakes, Rivers, Other Intakes | | | | | | | - | 0 | |
| 12 | 307 | Wells | | | | | | | 159,627 | 159,627 | (0) |
| 13 | 308 | Infiltration Galleries & Tunnels | | | | | | | - | 0 | |
| 14 | 309 | Supply Mains | | | | | | | - | 2,201,526 | 2,201,526 |
| 15 | 310 | Power Generation Equipment | | | | | | | - | 0 | |
| 16 | 311 | Pumping Equipment | | | | 87,676 | | | 4,101,283 | 5,926,668 | 1,825,385 |
| 17 | 320 | Water Treatment Plant | | | | 71,190 | | | 6,534,580 | 6,551,094 | 16,514 |
| 18 | 330 | Distribution Reservoirs & Standpipes | | | | | | | 8,196,473 | 4,989,253 | (3,207,220) |
| 19 | 331 | Transmission & Distribution Mains | | | | 977,835 | | | 24,370,169 | 24,395,984 | 25,815 |
| 20 | 333 | Services | | | | | | | 10,902,284 | 10,890,767 | (11,517) |
| 21 | 334 | Meters & Meter Installation | | | | | | | 2,916,068 | 2,916,068 | 0 |
| 22 | 335 | Hydrants | | | | | | | 2,028,958 | 2,019,913 | (9,045) |
| 23 | 336 | Backflow Prevention Devices | | | | | | | - | 0 | |
| 24 | 339 | Other Plant & Misc. Equipment | | | | 19,005 | | | 1,629,692 | 184,742 | (1,444,950) |
| 25 | 340 | Office Furniture & Equipment | | | | | | | 305,068 | 305,068 | (0) |
| 26 | 341 | Transportation Equipment | | | | | | | 494,662 | 494,662 | 0 |
| 27 | 342 | Stores Equipment | | | | | | | - | 0 | |
| 28 | 343 | Tools, Ship & Garage Equipment | | | | 22,827 | | | 172,266 | 190,662 | 18,396 |
| 29 | 344 | Laboratory Equipment | | | | | | | - | 0 | |
| 30 | 345 | Power Operated Equipment | | | | | | | 18,396 | 0 | (18,396) |
| 31 | 346 | Communication Equipment | | | | | | | 43,327 | 43,326 | (1) |
| 32 | 347 | Miscellaneous Equipment | | | | | | | 380,435 | 0 | (380,435) |
| 33 | 348 | Other Tangible Plant | | | | | | | - | 0 | |
| 34 | | Subtotal | | | | 1,232,912 | - | - | 65,617,300 | 65,617,301 | 1 |
| 35 | | General Office Plant Allocation | | | | | | | | | |
| 36 | | Total Authorized Plant in Service | | | | 1,232,912 | - | - | 65,617,300 | 65,617,301 | 1 |
| 37 | | | | | | | | | | | |
| 38 | | | | | | | | | | | |
| 39 | | | | | | | | | | | |
| 40 | | | | | | | | | | | |
| 41 | | | | | | | | | | | |
| 42 | | | | | | | | | | | |

Attachment G

Chaparral City Water Company
Docket No. W-02113A-13-0118

Response to Data Request No. RUCO 7.05 1st Supplement

| Row Labels | Sum of Accum Deprec |
|--------------------|----------------------|
| 271210-1-1- | (1,527,213.25) |
| 271220-1-1- | (348,463.55) |
| 271230-1-1- | (59,342.51) |
| 271240-1-1- | (438,114.54) |
| 271250-1-1- | (70,720.16) |
| 271260-1-1- | (71,297.54) |
| 303600-1-1- | 0.00 |
| 304200-1-1- | 63,345.53 |
| 304300-1-1- | 125,819.42 |
| 304400-1-1- | 32,879.48 |
| 304500-1-1- | 493,170.22 |
| 305000-1-1- | 683,895.50 |
| 307000-1-1- | (9,316.29) |
| 309000-1-1- | 1,477,461.70 |
| 311000-1-1- | 5,016,103.48 |
| 320100-1-1- | 1,503,631.08 |
| 330000-1-1- | 1,529,748.23 |
| 331001-1-1- | 8,472,352.06 |
| 333000-1-1- | 2,551,906.48 |
| 334100-1-1- | 2,423,379.36 |
| 335000-1-1- | 413,304.53 |
| 339100-1-1- | 638.73 |
| 339500-1-1- | 57,345.15 |
| 340100-1-1- | 226,215.80 |
| 341100-1-1- | 494,662.37 |
| 343000-1-1- | 88,854.42 |
| 345000-1-1- | 17,314.46 |
| 346200-1-1- | 43,326.48 |
| 347000-1-1- | 41,221.33 |
| Grand Total | 23,232,107.97 |

**SOUTHERN CALIFORNIA WATER COMPANY
DEPRECIATION PROVISION - 2007
Chaparral- Co 500
RATES EFFECTIVE**

| Acct | Description | Fixed Capital 12/31/2006 | Rate | Accrual | 2007 Expense | Accum Depre'n as of 12/31/07 FINAL |
|---|---|-----------------------------|-------|------------|-----------------|--|
| 301 | Organization | | 0.00 | 0.00 | 0.00 | |
| 302 | Franchises and Consents | | 0.00 | 0.00 | 0.00 | |
| 303 | Other Intangible Plant | 34,063 | 0.00 | 0.00 | 0.00 | 639 |
| 303 | Other Intangible Plant-Conservation | | 0.00 | 0.00 | 0.00 | |
| 306/7 | Land and Land Rights | 271,857 | 0.00 | 0.00 | 0.00 | |
| 311 | Structures and Improvements - Supply | | 3.33 | 0.00 | 0.00 | |
| 312 | Collecting and Impounding Reservoirs | 1,006,989 | 2.50 | 25,174.72 | 25,174.72 | 553,547 |
| 313 | Lake, River and Other Intakes | | 2.50 | 0.00 | 0.00 | |
| 314 | Springs and Tunnels | | 0.00 | 0.00 | 0.00 | |
| 315 | Wells | 332,065 | 3.33 | 11,057.77 | 11,057.77 | 65,990 |
| 316 | Supply Mains | 3,621,713 | 2.00 | 72,434.26 | 72,434.26 | 1,195,789 |
| 317 | Other Sources of Supply Plant | | 0.00 | 0.00 | 0.00 | |
| 321 | Structures and Improvements - Pumping | 190,044 | 3.33 | 6,328.46 | 6,328.46 | 31,700 |
| 324 | Pumping Equipment | 1,483,614 | 12.50 | 185,451.77 | 185,451.77 | 1,019,908 |
| 325 | Other Pumping Plant | 1,650,197 | 12.50 | 206,274.62 | 206,274.62 | 410,765 |
| 331 | Structures and Improvements - Treatment | 517,411 | 3.33 | 17,229.79 | 17,229.79 | 31,960 |
| 332 | Water Treatment Equipment | 7,757,814 | 3.33 | 258,335.21 | 246,289.74 | 2,356,570 |
| 341 | Structures and Improvements - T & D | 9,623 | 3.33 | 320.45 | 320.45 | 7,108 |
| 342 | Reservoirs and Tanks | 3,543,013 | 2.22 | 78,654.90 | 78,654.90 | 978,339 |
| 343 | Transmission and Distribution Mains | 17,450,634 | 2.00 | 349,012.68 | 261,375.80 | 6,303,711 |
| 345 | Services | 7,389,930 | 3.33 | 246,084.66 | 240,781.41 | 1,475,063 |
| 346 | Meters | 2,722,117 | 8.33 | 226,752.33 | 152,589.24 | 1,258,939 |
| 348 | Hydrants | 1,171,633 | 2.00 | 23,432.65 | 22,257.31 | 270,147 |
| 349 | Other Transmission & Distribution Plant | 25,811 | 6.67 | 1,721.57 | 1,721.57 | 18,350 |
| 371 | Structures & Improvements - General | 801,570 | 3.33 | 26,692.29 | 26,692.29 | 355,958 |
| 372 | Office Furniture and Equipment | 175,374 | 6.67 | 11,697.42 | 11,697.42 | 92,197 |
| 372/1 | Computer | 45,680 | 20.00 | 9,135.96 | 9,135.96 | |
| 372/2 | Software | 11,180 | 20.00 | 2,236.09 | 2,236.09 | |
| 372/3 | Peripherals | 38,125 | 20.00 | 7,624.90 | 7,624.90 | |
| 373 | Transportation Equipment | 535,315 | 20.00 | 107,063.05 | 89,932.96 | 195,865 |
| 375 | Laboratory Equipment | | 0.00 | 0.00 | 0.00 | |
| 376 | Communication Equipment | 39,105 | 10.00 | 3,910.46 | 3,284.79 | |
| 377 | Power Operated Equipment | | 0.00 | 0.00 | 0.00 | 29,514 |
| 378 | Tool, Shop and Garage Equipment | 149,365 | 5.00 | 7,468.26 | 6,273.34 | 44,243 |
| 379 | Other General Plant | 41,221 | 3.33 | 0.00 | 0.00 | 41,221 |
| 390 | Other Tangible Property | | 10.00 | 0.00 | 0.00 | |
| 391 | Utility Plant Purchased | | 0.00 | 0.00 | 0.00 | |
| 391 | Utility Plant Purchased - non-depreciable | | 0.00 | 0.00 | 0.00 | |
| 391 | Capital Lease Projects | | 0.00 | 0.00 | 0.00 | |
| various | Transfer from Accelerated Depreciation | | 0.00 | 0.00 | 0.00 | |
| Total for Amortization | | | | | | 0 |
| Total for Depreciation | | | | | | 1,684,819.56 |
| Total Non-Depreciable | | | | | | 0 |
| Total Plant in Service | | | | | | 16,737,559 |
| Depreciation Expense per 2007 Financials | | | | | | Dep. Reserve per 2007 Financials |

CHAPARRAL CITY WATER COMPANY
DEPRECIATION PROVISION - 2009
COMPANY 500
RATES EFFECTIVE

| Acct | Description | Fixed Capital 12/31/2008 | Composite Rate | Accrual | Contributions | | OVERHEAD | | Expense |
|------------------------|---|-----------------------------|-------------------|------------|---------------|------------|----------|-----------|------------|
| | | | | | Capital | Accrual | Acct | Amount | |
| 301 | Organization | 0 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 |
| 302 | Franchises and Consents | 0 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 |
| 303 | Other Intangible Plant | 1,316,797 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 |
| 306/7 | Other Intangible Plant-Conservation | 0 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 |
| 311 | Land and Land Rights | 271,857 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 |
| 312 | Structures and Improvements - Supply | 0 | 3.33 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 |
| 313 | Collecting and Impounding Reservoirs | 1,006,989 | 2.50 | 25,174.72 | 0.00 | 0.00 | | 0.00 | 25,174.72 |
| 314 | Lake, River and Other Intakes | 0 | 2.50 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 |
| 315 | Springs and Tunnels | 0 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 |
| 316 | Wells | 332,065 | 3.33 | 11,057.77 | 0.00 | 0.00 | | 0.00 | 11,057.77 |
| 317 | Supply Mains | 3,700,065 | 2.00 | 74,001.30 | 0.00 | 0.00 | | 0.00 | 74,001.30 |
| 321 | Other Sources of Supply Plant | 0 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 |
| 324 | Structures and Improvements - Pumping | 190,044 | 3.33 | 6,328.46 | 0.00 | 0.00 | | 0.00 | 6,328.46 |
| 325 | Pumping Equipment | 3,472,802 | 12.50 | 434,100.19 | 0.00 | 0.00 | | 0.00 | 434,100.19 |
| 331 | Other Pumping Plant | 1,805,328 | 12.50 | 225,666.02 | 0.00 | 0.00 | | 0.00 | 225,666.02 |
| 332 | Structures and Improvements - Treatment | 539,646 | 3.33 | 17,970.20 | 0.00 | 0.00 | | 0.00 | 17,970.20 |
| 341 | Water Treatment Equipment | 8,185,399 | 3.33 | 272,573.79 | 394,464.26 | 13,135.66 | | 0.00 | 259,438.13 |
| 342 | Structures and Improvements - T & D | 169,971 | 3.33 | 5,660.04 | 0.00 | 0.00 | | 0.00 | 5,660.04 |
| 343 | Reservoirs and Tanks | 5,151,653 | 2.22 | 114,366.69 | 2,135,667.93 | 47,411.83 | | 0.00 | 66,954.86 |
| 345 | Transmission and Distribution Mains | 21,239,455 | 2.00 | 424,789.10 | 7,968,626.38 | 159,372.53 | | 0.00 | 265,416.57 |
| 346 | Services | 9,316,378 | 3.33 | 310,235.39 | 401,546.03 | 13,371.48 | | 0.00 | 296,863.91 |
| 348 | Meters | 2,841,112 | 8.33 | 236,664.66 | 1,636,972.50 | 4,732.39 | | 0.00 | 100,304.85 |
| 349 | Hydrants | 1,707,843 | 2.00 | 34,156.86 | 236,619.32 | 0.00 | | 0.00 | 29,424.48 |
| 371 | Other Transmission & Distribution Plant | 93,523 | 6.67 | 6,237.97 | 0.00 | 0.00 | | 0.00 | 6,237.97 |
| 372 | Structures & Improvements - General | 805,351 | 3.33 | 26,818.20 | 0.00 | 0.00 | | 0.00 | 26,818.20 |
| 372/1 | Office Furniture and Equipment | 277,049 | 6.67 | 18,479.19 | 0.00 | 0.00 | | 0.00 | 18,479.19 |
| 372/2 | Computer | 0 | 20.00 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 |
| 372/3 | Software | 0 | 20.00 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 |
| 373 | Peripherals | 0 | 20.00 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 |
| 375 | Transportation Equipment | 547,936 | 20.00 | 109,587.11 | 0.00 | 0.00 | 14303 | 25,205.03 | 84,382.07 |
| 376 | Laboratory Equipment | 0 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 |
| 377 | Communication Equipment | 43,326 | 10.00 | 4,332.65 | 0.00 | 0.00 | 14303 | 996.51 | 3,336.14 |
| 378 | Power Operated Equipment | 18,396 | 0.00 | 0.00 | 0.00 | 0.00 | 14303 | 0.00 | 0.00 |
| 379 | Tool, Shop and Garage Equipment | 151,351 | 5.00 | 7,567.55 | 0.00 | 0.00 | 14311 | 1,740.54 | 5,827.01 |
| 390 | Other General Plant | 41,221 | 3.33 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 |
| 391 | Other Tangible Property | 0 | 10.00 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 |
| 391 | Utility Plant Purchased | 0 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 |
| 391 | Utility Plant Purchased - non-depreciable | 0 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 |
| various | Capital Lease Projects | 0 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 |
| | Transfer from Accelerated Depreciation | | | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 |
| Total for Amortization | | 1,316,797 | 0.00 | 0 | 0 | 0 | | 0 | 0 |
| Total for Depreciation | | 61,636,903 | 3.84 | 2,365,768 | 12,773,896 | 374,384 | | 27,942 | 1,963,442 |
| Total Non-Depreciable | | 271,857 | | 0 | 0 | 0 | | 0 | 0 |
| Total Plant in Service | | 63,225,557 | | 2,365,768 | 12,773,896 | 374,384 | | 27,942 | 1,963,442 |

BEFORE THE ARIZONA CORPORATION COMMISSION

BOB STUMP
CHAIRMAN
GARY PIERCE
COMMISSIONER
BRENDA BURNS
COMMISSIONER
BOB BURNS
COMMISSIONER
SUSAN BITTER SMITH
COMMISSIONER

IN THE MATTER OF THE APPLICATION OF
CHAPARRAL CITY WATER COMPANY FOR
A DETERMINATION OF THE CURRENT
FAIR VALUE OF ITS UTILITY PLANT AND
PROPERTY AND FOR INCREASE IN ITS
RATES AND CHARGES BASED THEREON.

Docket No. W-02113A-13-0118

NOTICE OF ERRATA

The Residential Utility Consumer Office hereby provides Notice of Errata to the
Schedules to Jeffrey Michlik's Surrebuttal Testimony, in the above-referenced matter.
Attached are the corrected schedules.

RESPECTFULLY SUBMITTED this 13th day of February, 2014.



Daniel W. Pozefsky
Chief Counsel

AN ORIGINAL AND THIRTEEN COPIES
of the foregoing filed this 13th day
of February, 2014 with:

Docket Control
Arizona Corporation Commission
1200 West Washington
Phoenix, Arizona 85007

COPIES of the foregoing hand delivered/
mailed this 13th day of February, 2014 to:

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By Cheryl Fraulob
Cheryl Fraulob

Chaparral City Water Company
Docket No. W-02113A-13-0118
Test Year Ended: December 31, 2012

Surrebuttal Testimony of Jeffrey M. Michlik

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REVENUE REQUIREMENT

| LINE NO. | DESCRIPTION | (A) COMPANY FAIR VALUE | (B) RUCO FAIR VALUE |
|-------------|---------------------------------------|---------------------------------|------------------------------|
| 1 | Adjusted Rate Base | \$ 27,269,321 | \$ 24,724,611 |
| 2 | Adjusted Operating Income (Loss) | \$ 889,596 | \$ 1,325,132 |
| 3 | Current Rate of Return (L2 / L1) | 3.26% | 5.36% |
| 4 | Required Rate of Return | 10.21% | 7.98% |
| 5 | Required Operating Income (L4 * L1) | \$ 2,783,254 | \$ 1,973,024 |
| 6 | Operating Income Deficiency (L5 - L2) | \$ 1,893,658 | \$ 647,892 |
| 7 | Gross Revenue Conversion Factor | 1.6587 | 1.6492 |
| 8 | Required Revenue Increase (L7 * L6) | \$ 3,141,028 | \$ 1,068,501 |
| 9 | Adjusted Test Year Revenue | \$ 9,014,985 | \$ 9,080,945 |
| 10 | Proposed Annual Revenue (L8 + L9) | \$ 12,156,013 | \$ 10,149,446 |
| 11 | Required Increase in Revenue (%) | 34.84% | 11.77% |

References:

Column (A): Company Schedule A-1

Column (B): Staff Schedules JMM-3 and JMM-12

GROSS REVENUE CONVERSION FACTOR

| LINE NO. | DESCRIPTION | (A) | (B) | (C) | (D) |
|--|--|---------------|--------------|---------------|-----|
| <u>Calculation of Gross Revenue Conversion Factor:</u> | | | | | |
| 1 | Revenue | 100.0000% | | | |
| 2 | Uncollectible Factor (Line 11) | 0.5492% | | | |
| 3 | Revenues (L1 - L2) | 99.4508% | | | |
| 4 | Combined Federal and State Income Tax and Property Tax Rate (Line 23) | 38.8151% | | | |
| 5 | Subtotal (L3 - L4) | 60.6356% | | | |
| 6 | Revenue Conversion Factor (L1 / L5) | 1.649195 | | | |
| <u>Calculation of Uncollectible Factor:</u> | | | | | |
| 7 | Unity | 100.0000% | | | |
| 8 | Combined Federal and State Tax Rate (Line 23) | 38.2900% | | | |
| 9 | One Minus Combined Income Tax Rate (L7 - L8) | 61.7100% | | | |
| 10 | Uncollectible Rate | 0.8900% | | | |
| 11 | Uncollectible Factor (L9 * L10) | 0.5492% | | | |
| <u>Calculation of Effective Tax Rate:</u> | | | | | |
| 12 | Operating Income Before Taxes (Arizona Taxable Income) | 100.0000% | | | |
| 13 | Arizona State Income Tax Rate | 6.5000% | | | |
| 14 | Federal Taxable Income (L12 - L13) | 93.5000% | | | |
| 15 | Applicable Federal Income Tax Rate (Line 55) | 34.0000% | | | |
| 16 | Effective Federal Income Tax Rate (L14 x L15) | 31.7900% | | | |
| 17 | Combined Federal and State Income Tax Rate (L13 + L16) | | 38.2900% | | |
| <u>Calculation of Effective Property Tax Factor</u> | | | | | |
| 18 | Unity | 100.0000% | | | |
| 19 | Combined Federal and State Income Tax Rate (L17) | 38.2900% | | | |
| 20 | One Minus Combined Income Tax Rate (L18-L19) | 61.7100% | | | |
| 21 | Property Tax Factor | 0.8510% | | | |
| 22 | Effective Property Tax Factor (L20*L21) | | 0.5251% | | |
| 23 | Combined Federal and State Income Tax and Property Tax Rate (L17+L22) | | | 38.8151% | |
| 24 | Required Operating Income | \$ 1,973,024 | | | |
| 25 | Adjusted Test Year Operating Income (Loss) | 1,325,132 | | | |
| 26 | Required Increase in Operating Income (L24 - L25) | | \$ 647,892 | | |
| 27 | Income Taxes on Recommended Revenue (Col. [E], L52) | \$ 860,641 | | | |
| 28 | Income Taxes on Test Year Revenue (Col. [B], L52) | 458,635 | | | |
| 29 | Required Increase in Revenue to Provide for Income Taxes (L27 - L28) | | 402,006 | | |
| 30 | Recommended Revenue Requirement | \$ 1,068,501 | | | |
| 31 | Uncollectible Rate (Line 10) | 0.8900% | | | |
| 32 | Uncollectible Expense on Recommended Revenue (L30*L31) | \$ 9,510 | | | |
| 33 | Adjusted Test Year Uncollectible Expense | \$ - | | | |
| 34 | Required Increase in Revenue to Provide for Uncollectible Exp. (L32-L33) | | 9,510 | | |
| 35 | Property Tax with Recommended Revenue | \$ 242,987 | | | |
| 36 | Property Tax on Test Year Revenue | 233,894 | | | |
| 37 | Increase in Property Tax Due to Increase in Revenue (L35-L36) | | 9,093 | | |
| 38 | Total Required Increase in Revenue (L26 + L29 + L34 + L37) | | \$ 1,068,501 | | |
| <u>Calculation of Income Tax:</u> | | | | | |
| 39 | Revenue | \$ 9,080,945 | \$ 1,068,501 | \$ 10,149,446 | |
| 40 | Operating Expenses Excluding Income Taxes | \$ 7,297,178 | | \$ 7,315,780 | |
| 41 | Synchronized Interest (L56) | \$ 585,973 | | \$ 585,973 | |
| 42 | Arizona Taxable Income (L39 - L40 - L41) | \$ 1,197,794 | | \$ 2,247,692 | |
| 43 | Arizona State Income Tax Rate | 6.5000% | | 6.5000% | |
| 44 | Arizona Income Tax (L42 x L43) | \$ 77,857 | | \$ 146,100 | |
| 45 | Federal Taxable Income (L42 - L44) | \$ 1,119,937 | | \$ 2,101,592 | |
| 46 | Federal Tax on First Income Bracket (\$1 - \$50,000) @ 15% | \$ 7,500 | | \$ 7,500 | |
| 47 | Federal Tax on Second Income Bracket (\$51,001 - \$75,000) @ 25% | \$ 6,250 | | \$ 6,250 | |
| 48 | Federal Tax on Third Income Bracket (\$75,001 - \$100,000) @ 34% | \$ 8,500 | | \$ 8,500 | |
| 49 | Federal Tax on Fourth Income Bracket (\$100,001 - \$335,000) @ 39% | \$ 91,650 | | \$ 91,650 | |
| 50 | Federal Tax on Fifth Income Bracket (\$335,001 - \$10,000,000) @ 34% | \$ 266,879 | | \$ 600,641 | |
| 51 | Total Federal Income Tax | \$ 380,779 | | \$ 714,541 | |
| 52 | Combined Federal and State Income Tax (L44 + L51) | \$ 458,635 | | \$ 860,641 | |
| 53 | Applicable Federal Income Tax Rate [Col. [E], L51 - Col. [B], L51] / [Col. [E], L45 - Col. [B], L45] | | | 34.0000% | |
| <u>Calculation of Interest Synchronization:</u> | | | | | |
| 54 | Rate Base | \$ 24,724,611 | | | |
| 55 | Weighted Average Cost of Debt | 2.3700% | | | |
| 56 | Synchronized Interest | \$ 585,973 | | | |

RATE BASE - ORIGINAL COST

| LINE NO. | | (A) COMPANY AS FILED | (B) RUCO ADJUSTMENTS | (C) RUCO AS ADJUSTED |
|-------------|---|-------------------------------|----------------------------|-------------------------------|
| 1 | Plant in Service | \$ 69,502,064 | \$ (1,776,008) | \$ 67,726,056 |
| 2 | Less: Accumulated Depreciation | 25,734,123 | (43,103) | 25,691,020 |
| 3 | Net Plant in Service | <u>\$ 43,767,940</u> | <u>\$ (1,732,905)</u> | <u>\$ 42,035,036</u> |
| 4 | | | | |
| 5 | <u>LESS:</u> | | | |
| 6 | | | | |
| 7 | Contributions in Aid of Construction (CIAC) | \$ 14,991,871 | \$ - | \$ 14,991,871 |
| 8 | Less: Accumulated Amortization | 2,529,950 | - | \$ 2,529,950 |
| 9 | Net CIAC | <u>12,461,921</u> | <u>-</u> | <u>\$ 12,461,921</u> |
| 10 | | | | |
| 11 | Advances in Aid of Construction (AIAC) | 4,008,916 | - | 4,008,916 |
| 12 | | | | |
| 13 | Customer Meter Deposits | 1,950 | - | 1,950 |
| 14 | Customer Deposits | - | - | - |
| 15 | Deferred Income Taxes & Credits | 1,271,696 | - | 1,271,696 |
| 17 | FHSD Settlement | 449,580 | | 449,580 |
| 18 | | | | |
| 19 | <u>ADD:</u> | | | |
| 20 | | | | |
| 21 | | | | |
| 22 | Deferred Debits | 686,104 | (686,104) | - |
| 23 | | | | |
| 24 | Working Capital Allowance | 1,009,341 | (125,703) | 883,638 |
| 25 | | | | |
| 26 | | | | |
| 27 | Original Cost Rate Base | <u>\$ 27,269,321</u> | <u>\$ (2,544,710)</u> | <u>\$ 24,724,611</u> |

References:

Column [A]: Company as Filed

Column [B]: Schedule JMM-4

Column (C): Column (A) + Column (B)

SUMMARY OF ORIGINAL COST RATE

| LINE NO. | ACCT. NO. | DESCRIPTION | [A] | [B] | [C] | [D] | [E] | [F] | [G] | [H] | [I] |
|-------------------|---|---|------------------|--|---|---|---|---|--|---|---------------|
| PLANT IN SERVICE. | | | COMPANY AS FILED | ADJ.#1 Post-Test Year Plant Ref. Sch JMM-5 | ADJ.#2 Retirement of Transportation Vehicles Ref. Sch JMM-6 | ADJ.#3 Asset Retirement obligation Ref. Sch JMM-7 | ADJ.#4 Customer Deposits Ref. Sch JMM-8 | ADJ.#5 Removal of CAP Deferral Ref. Sch JMM-9 | ADJ.#6 Removal of 24 Months AFUDC and Dep. Expense Ref. Sch JMM-10 | ADJ.#7 Cash Working Capital Allowance Ref. Sch JMM-11 | RUCO ADJUSTED |
| 1 | 301 | Organization Cost | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| 2 | 302 | Franchise Cost | - | - | - | - | - | - | - | - | 1,554,591 |
| 3 | 303 | Land and Land Rights | 1,554,591 | - | - | - | - | - | - | - | 1,779,391 |
| 4 | 304 | Structures and Improvements | 1,779,391 | - | - | - | - | - | - | - | 1,013,959 |
| 5 | 305 | Collecting and Impounding Res. | 1,013,959 | - | - | (5,252) | - | - | - | - | 159,627 |
| 6 | 306 | Lake River and Other Intakes | - | - | - | - | - | - | - | - | - |
| 7 | 307 | Wells and Springs | 159,627 | - | - | - | - | - | - | - | 2,201,526 |
| 8 | 308 | Infiltration Galleries and Tunnels | - | - | - | - | - | - | - | - | 5,926,668 |
| 9 | 309 | Supply Mains | 2,201,526 | - | - | - | - | - | - | - | 6,551,084 |
| 10 | 310 | Power Generation Equipment | - | - | - | - | - | - | - | - | 4,989,253 |
| 11 | 311 | Electric Pumping Equipment | 5,926,668 | - | - | - | - | - | - | - | 24,390,732 |
| 12 | 312 | Water Treatment Plant | - | - | - | - | - | - | - | - | 10,890,767 |
| 13 | 320.1 | Water Treatment Equipment | 6,551,084 | - | - | - | - | - | - | - | 2,916,068 |
| 14 | 320.2 | Water Treatment Equipment | 4,989,253 | - | - | - | - | - | - | - | 2,019,913 |
| 15 | 330.1 | Distribution Reservoirs and Standpipes | 24,390,732 | - | - | - | - | - | - | - | 143,521 |
| 16 | 331 | Transmission and Distribution Mains | 10,890,767 | - | - | - | - | - | - | - | 305,068 |
| 17 | 333 | Services | 2,916,068 | - | - | - | - | - | - | - | 417,314 |
| 18 | 334 | Meters | 2,019,913 | - | - | - | - | - | - | - | 190,662 |
| 19 | 335 | Hydrants | - | - | - | - | - | - | - | - | 43,326 |
| 20 | 336 | Backflow Prevention Devices | - | - | - | - | - | - | - | - | 41,221 |
| 21 | 339 | Other Plant and Miscellaneous Equipment | 143,521 | - | - | - | - | - | - | - | 65,534,701 |
| 22 | 340 | Office Furniture and Fixtures | 305,068 | - | - | - | - | - | - | - | 1,089,580 |
| 23 | 340.1 | Computer and Software | - | - | (77,348) | - | - | - | - | - | - |
| 24 | 341 | Transportation Equipment | 494,662 | - | - | - | - | - | - | - | 73,035 |
| 25 | 342 | Stores Equipment | - | - | - | - | - | - | - | - | 670,421 |
| 26 | 343 | Tools and Work Equipment | 190,662 | - | - | - | - | - | - | - | 66,964 |
| 27 | 344 | Laboratory Equipment | - | - | - | - | - | - | - | - | - |
| 28 | 345 | Power Operated Equipment | 43,326 | - | - | - | - | - | - | - | 219,432 |
| 29 | 346 | Communications Equipment | - | - | - | - | - | - | - | - | 9,637 |
| 30 | 347 | Miscellaneous Equipment | - | - | - | - | - | - | - | - | 36,935 |
| 31 | 348 | Other Tangible Plant | 41,221 | - | - | - | - | - | - | - | 45,351 |
| 32 | Total Plant in Service - Sub Total | | | 65,617,301 | (77,348) | (5,252) | - | - | - | - | 2,191,355 |
| 33 | Post Test Year Plant | | | | | | | | | | |
| 34 | 307 | Wells and Springs | 793,374 | 276,208 | - | - | - | - | - | - | 1,089,580 |
| 35 | 307 | Electric Pumping Equipment | 130,000 | (130,000) | - | - | - | - | - | - | - |
| 36 | 311 | Water Treatment Equipment | 409,369 | (306,334) | - | - | - | - | - | - | 73,035 |
| 37 | 320.2 | Distribution Reservoirs and Standpipes | 1,245,860 | (975,439) | - | - | - | - | - | - | 670,421 |
| 38 | 330.1 | Transmission and Distribution Mains | 353,577 | (286,613) | - | - | - | - | - | - | 66,964 |
| 39 | 331 | Services | 410,000 | (410,000) | - | - | - | - | - | - | - |
| 40 | 333 | Meters | 300,000 | (300,000) | - | - | - | - | - | - | - |
| 41 | 334 | Hydrants | 10,000 | (10,000) | - | - | - | - | - | - | - |
| 42 | 335 | Other Plant and Miscellaneous Equipment | 132,558 | 86,874 | - | - | - | - | - | - | 219,432 |
| 43 | 339 | Transportation Equipment | 9,248 | 389 | - | - | - | - | - | - | 9,637 |
| 44 | 341 | Tools and Work Equipment | 31,777 | 5,158 | - | - | - | - | - | - | 36,935 |
| 45 | 343 | Communications Equipment | 59,000 | (13,649) | - | - | - | - | - | - | 45,351 |
| 46 | 346 | Communications Equipment | 3,884,763 | (1,893,408) | - | - | - | - | - | - | 2,191,355 |
| 33 | Total Post Test Year Plant | | | | | | | | | | |
| 34 | Total Plant in Service | | | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| 35 | Less: Accumulated Depreciation | | | 25,734,123 | (77,348) | (5,252) | (4,364) | - | - | - | 67,726,056 |
| 36 | | | | | | | | | | | 25,691,020 |
| 37 | Net Plant in Service | | | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| 38 | | | | 43,687,840 | (1,132,017) | (889) | | | | | 42,035,036 |
| 39 | LESS: | | | | | | | | | | |
| 40 | Contributions in Aid of Construction (CIAC) | | | | | | | | | | |
| 41 | Less: Accumulated Amortization | | | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| 42 | Net CIAC (L25 - L26) | | | 14,991,871 | - | - | - | - | - | - | 14,991,871 |
| 43 | Advances in Aid of Construction (AIAC) | | | 2,529,950 | - | - | - | - | - | - | 2,529,950 |
| 44 | Customer Meter Deposits | | | 12,461,921 | - | - | - | - | - | - | 12,461,921 |
| 45 | Customer Deposits | | | 4,008,916 | - | - | - | - | - | - | 4,008,916 |
| 46 | Deferred Income Taxes & Credits | | | 1,950 | - | - | - | - | - | - | 1,950 |
| 47 | FHSO Settlement | | | 1,271,696 | - | - | - | - | - | - | 1,271,696 |
| 48 | | | | 449,580 | - | - | - | - | - | - | 449,580 |
| 49 | ADG: | | | | | | | | | | |
| 50 | Deferred Debits | | | 686,104 | - | - | - | (78,206) | (607,898) | - | - |
| 51 | Working Capital Allowance | | | 1,009,341 | - | - | - | - | - | (125,703) | 883,638 |
| 52 | | | | | | | | | | | |
| 53 | Original Cost Rate Base | | | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| | | | | 27,269,321 | (1,132,017) | (889) | | (78,206) | (607,898) | (125,703) | 24,724,811 |

RATE BASE ADJUSTMENT NO. 4 - POST-TEST YEAR PLANT AND ACCUMULATED DEPRECIATION

| LINE NO. | ACCT NO. | DESCRIPTION | [A] COMPANY PROPOSED | [B] RUCO ADJUSTMENTS | [C] RUCO ¹ RECOMMENDED |
|----------|---|---|-------------------------|----------------------------|--------------------------------------|
| 1 | 307 | Wells and Springs | \$ 793,374 | \$ 276,206 | \$ 1,069,580 |
| 2 | 311 | Electric Pumping Equipment | 130,000 | (130,000) | - |
| 3 | 320.2 | Water Treatment Equipment | 409,369 | (336,334) | 73,035 |
| 4 | 330.1 | Distribution Reservoirs and Standpipes | 1,245,860 | (575,439) | 670,421 |
| 5 | 331 | Transmission and Distribution Mains | 353,577 | (286,613) | 66,964 |
| 6 | 333 | Services | 410,000 | (410,000) | - |
| 7 | 334 | Meters | 300,000 | (300,000) | - |
| 8 | 335 | Hydrants | 10,000 | (10,000) | - |
| 9 | 339 | Other Plant and Miscellaneous Equipment | 132,558 | 86,874 | 219,432 |
| 10 | 341 | Transportation Equipment | 9,248 | 389 | 9,637 |
| 11 | 343 | Tools and Work Equipment | 31,777 | 5,158 | 36,935 |
| 12 | 346 | Communications Equipment | 59,000 | (13,649) | 45,351 |
| 13 | Total Test Year Plant | | \$ 3,884,763 | \$ (1,693,408) | \$ 2,191,355 |
| 14 | | | | | |
| 15 | Accumulated Depreciation 1/2 Convention on Post-Test Year Plant | | \$ - | \$ 38,609 | \$ 38,609 |
| 16 | | | | | |
| 17 | | | | | |
| 18 | RUCO's Calculation of Post-Test Year Accumulated Depreciation | | RUCO Recommended | 1/2 Year Depreciation Rate | Accumulated Depreciation |
| 19 | 307 | Wells and Springs | \$ 1,069,580 | 1.67% | 17,809 |
| 20 | 311 | Electric Pumping Equipment | - | 6.25% | - |
| 21 | 320.2 | Water Treatment Equipment | 73,035 | 1.67% | 1,216 |
| 22 | 330.1 | Distribution Reservoirs and Standpipes | 670,421 | 1.11% | 7,442 |
| 23 | 331 | Transmission and Distribution Mains | 66,964 | 1.00% | 670 |
| 24 | 333 | Services | - | 1.67% | - |
| 25 | 334 | Meters | - | 1.67% | - |
| 26 | 335 | Hydrants | - | 1.00% | - |
| 27 | 339 | Other Plant and Miscellaneous Equipment | 219,432 | 3.34% | 7,318 |
| 28 | 341 | Transportation Equipment | 9,637 | 10.00% | 964 |
| 29 | 343 | Tools and Work Equipment | 36,935 | 2.50% | 923 |
| 30 | 346 | Communications Equipment | 45,351 | 5.00% | 2,268 |
| | | | \$ 2,191,355 | | \$ 38,609 |

¹ Amounts may not reflect other adjustments.

REFERENCES:

Column [A]: Company Filing
Column [B]: Testimony JMM
Column [C]: Column [A] + Column [B]

RATE BASE ADJUSTMENT NO. 2 - RETIREMENT OF TRANSPORTATION EQUIPMENT

| LINE NO. | ACCT NO. | DESCRIPTION | [A] | [B] | [C] |
|-------------|-------------|--------------------------|---------------------|---------------------|----------------------------------|
| | | | COMPANY PROPOSED | RUCO ADJUSTMENTS | RUCO ¹ RECOMMENDED |
| 1 | 341 | Transportation Equipment | \$ 494,662 | \$ (77,348) | \$ 417,314 |
| 2 | | Accumulated Depreciation | 25,734,123 | (77,348) | 25,656,775 |

¹ Amounts may not reflect other adjustments.

REFERENCES:

Column [A]: Company Filing

Column [B]: Testimony JMM

Column [C]: Column [A] + Column [B]

RATE BASE ADJUSTMENT NO. 3 - ASSET RETIREMENT OBLIGATION

| LINE NO. | ACCT NO. | DESCRIPTION | [A] | [B] | [C] |
|-------------|-------------|--------------------------------|---------------------|---------------------|----------------------------------|
| | | | COMPANY PROPOSED | RUCO ADJUSTMENTS | RUCO ¹ RECOMMENDED |
| 1 | 305 | Collecting and Impounding Res. | \$ 1,019,211 | \$ (5,252) | \$ 1,013,959 |
| 2 | | | | | |
| 3 | | Accumulated Depreciation | 25,734,123 | (4,364) | 25,729,759 |

¹ Amounts may not reflect other adjustments.

REFERENCES:

Column [A]: Company Filing
Column [B]: Testimony JMM
Column [C]: Column [A] + Column [B]

Chaparral City Water Company
Docket No. W-02113A-13-0118
Test Year Ended: December 31, 2012

Surrebuttal Schedule JMM-8

RATE BASE ADJUSTMENT NO. 4 - CUSTOMER DEPOSITS

| LINE NO. | ACCT NO. | DESCRIPTION | [A] | [B] | [C] |
|-------------|-------------|-------------------|---------------------|---------------------|----------------------------------|
| | | | COMPANY PROPOSED | RUCO ADJUSTMENTS | RUCO ¹ RECOMMENDED |
| 1 | | Customer Deposits | \$ 1,950 | \$ - | \$ 1,950 |
| 2 | | | | | |

¹ Amounts may not reflect other adjustments.

REFERENCES:

Column [A]: Company Filing
Column [B]: Testimony JMM
Column [C]: Column [A] + Column [B]

RATE BASE ADJUSTMENT NO. 5 - REMOVAL OF DEFERRED CENTRAL ARIZONA PROJECT ("CAP") MAINTENANCE AND INDUSTRIAL ("M&I") CHARGES

| LINE NO. | ACCT NO. | DESCRIPTION | [A] | [B] | [C] |
|-------------|-------------|-----------------|---------------------|---------------------|----------------------------------|
| | | | COMPANY PROPOSED | RUCO ADJUSTMENTS | RUCO ¹ RECOMMENDED |
| 1 | | Deferred Debits | \$ 686,104 | \$ (78,206) | 607,898 |

¹ Amounts may not reflect other adjustments.

REFERENCES:

Column [A]: Company Filing

Column [B]: Testimony JMM

Column [C]: Column [A] + Column [B]

RATE BASE ADJUSTMENT NO. 6 - REMOVAL OF 24 MONTH DEFERRAL OF ALLOWANCE FOR FUNDS USED DURING CONSTRUCTION ("AFUDC") AND DEPRECIATION EXPENSE

| LINE NO. | ACCT NO. | DESCRIPTION | [A] | | [B] | | [C] | |
|-------------|-------------|-----------------|---------------------|---------|---------------------|-----------|----------------------------------|--------|
| | | | COMPANY PROPOSED | | RUCO ADJUSTMENTS | | RUCO ¹ RECOMMENDED | |
| | | Deferred Debits | \$ | 686,104 | \$ | (607,898) | \$ | 78,206 |

¹ Amounts may not reflect other adjustments.

REFERENCES:

Column [A]: Company Filing
Column [B]: Testimony JMM
Column [C]: Column [A] + Column [B]

RATE BASE ADJUSTMENT NO. 7 - CASH WORKING CAPITAL

| LINE NO. | ACCT NO. | DESCRIPTION | [A] | [B] | [C] |
|----------|----------|---------------------------|------------------|------------------|-------------------------------|
| | | | COMPANY PROPOSED | RUCO ADJUSTMENTS | RUCO ¹ RECOMMENDED |
| 1 | | Working Capital Allowance | \$ 1,009,341 | \$ (125,703) | 883,638 |

RUCO's Calculation

| | Proforma Test Year Amount | Revenue Lag (Lead) Days | Expense Lag (Lead) Days | Net Lag (Lead) Days Col. C - Col. D | Lead/Lag Factor Col. E/365 | Cash Working Capital Required Col. B * Col. F |
|---|---------------------------------|-------------------------------|-------------------------------|---|----------------------------------|---|
| (A) | (B) | (C) | (D) | (E) | (F) | (G) |
| OPERATING EXPENSES | | | | | | |
| Labor | 1,010,022 | 34.93 | 13.09 | 21.84 | 0.06 | 60,432 |
| Purchased Water | 1,127,229 | 34.93 | 43.67 | (8.74) | (0.02) | (26,995) |
| Fuel & Power | 611,340 | 34.93 | 27.86 | 7.07 | 0.02 | 11,840 |
| Chemicals | 116,658 | 34.93 | (79.22) | 114.15 | 0.31 | 36,483 |
| Waste Disposal & Other Utilities | 7,113 | 34.93 | 41.90 | (6.97) | (0.02) | (136) |
| Intercompany Support Services | 94,150 | 34.93 | 29.99 | 4.94 | 0.01 | 1,274 |
| Corporate Allocation | 359,073 | 34.93 | 30.00 | 4.93 | 0.01 | 4,849 |
| Outside Services | 508,106 | 34.93 | 88.00 | (53.07) | (0.15) | (73,879) |
| Group Insurance | 178,067 | 34.93 | 12.00 | 22.93 | 0.06 | 11,186 |
| Pensions | 85,086 | 34.93 | 67.98 | (33.05) | (0.09) | (7,705) |
| Regulatory Expense | - | - | - | - | - | - |
| Insurance Other Than Group | 73,025 | 34.93 | (26.14) | 61.07 | 0.17 | 12,218 |
| Customer Accounting (Less Bad Debt Expense) | 292,213 | 34.93 | 26.53 | 8.40 | 0.02 | 6,724 |
| Rents | 1,504 | 34.93 | - | 34.93 | 0.10 | 144 |
| General Office Expense | 164,179 | 34.93 | 39.69 | (4.76) | (0.01) | (2,142) |
| Miscellaneous | 151,474 | 34.93 | (3.22) | 38.15 | 0.10 | 15,832 |
| Maintenance Expense | 186,430 | 34.93 | 17.28 | 17.65 | 0.05 | 9,014 |
| TAXES | | | | | | |
| General Taxes-Property | 242,987 | 34.93 | 213.96 | (179.03) | (0.49) | (119,183) |
| General Taxes-Other | 86,320 | 34.93 | 3.03 | 31.90 | 0.09 | 7,544 |
| Income Tax | 458,635 | 34.93 | 37.00 | (2.07) | (0.01) | (2,602) |
| Interest Expense | 585,973 | 34.93 | 91.25 | (56.32) | (0.15) | (90,418) |
| TOTAL | 5,753,612 | | | | | (145,519) |
| CASH WORKING CAPITAL REQUIREMENT | | | | | | (145,519) |
| Company Recommended | | | | | | (19,817) |
| RUCO Adjustment | | | | | | (125,703) |

¹ Amounts may not reflect other adjustments.

REFERENCES:

Column [A]: Company Filing
Column [B]: Testimony JMM
Column [C]: Column [A] + Column [B]

OPERATING INCOME STATEMENT - ADJUSTED TEST YEAR AND RUCO RECOMMENDED

| LINE NO. | DESCRIPTION | [A] COMPANY ADJUSTED TEST YEAR AS FILED | [B] RUCO TEST YEAR ADJUSTMENTS | [C] RUCO TEST YEAR AS ADJUSTED | [D] RUCO PROPOSED CHANGES | [E] RUCO RECOMMENDED |
|----------|---------------------------------------|---|---|--|------------------------------------|----------------------------|
| 1 | <u>REVENUES:</u> | | | | | |
| 2 | Metered Water Sales | \$ 8,915,656 | \$ 65,960 | \$ 8,981,616 | \$ 1,068,501 | \$ 10,050,117 |
| 3 | Water Sales-Unmetered | - | - | - | - | - |
| 4 | Other Operating Revenue | 99,329 | - | 99,329 | - | 99,329 |
| 5 | Intentionally Left Blank | - | - | - | - | - |
| 6 | Total Operating Revenues | <u>\$ 9,014,985</u> | <u>\$ 65,960</u> | <u>\$ 9,080,945</u> | <u>\$ 1,068,501</u> | <u>\$ 10,149,446</u> |
| 7 | | | | | | |
| 8 | <u>OPERATING EXPENSES:</u> | | | | | |
| 9 | Salaries and Wages | \$ 1,024,112 | \$ (14,090) | \$ 1,010,022 | \$ - | \$ 1,010,022 |
| 10 | Purchased Water | 1,065,953 | 61,276 | 1,127,229 | - | 1,127,229 |
| 11 | Fuel & Power | 605,885 | 5,455 | 611,340 | - | 611,340 |
| 12 | Fuel for Power Production | - | - | - | - | - |
| 13 | Chemicals | 119,266 | (2,608) | 116,658 | - | 116,658 |
| 14 | Waste Disposal | 7,113 | - | 7,113 | - | 7,113 |
| 15 | Intercompany Support Services | 94,150 | - | 94,150 | - | 94,150 |
| 16 | Corporate Allocation | 500,330 | (141,257) | 359,073 | - | 359,073 |
| 17 | Outside Services | 508,106 | - | 508,106 | - | 508,106 |
| 18 | Group Insurance | 178,067 | - | 178,067 | - | 178,067 |
| 19 | Pensions | 85,086 | - | 85,086 | - | 85,086 |
| 20 | Regulatory Expense | 91,668 | - | 91,668 | - | 91,668 |
| 21 | Insurance Other Than Group | 73,025 | - | 73,025 | - | 73,025 |
| 22 | Customer Accounting | 318,959 | - | 318,959 | 9,510 | 328,469 |
| 23 | Rents | 1,504 | - | 1,504 | - | 1,504 |
| 24 | General Office Expense | 164,179 | - | 164,179 | - | 164,179 |
| 25 | Miscellaneous Expenses | 158,553 | (7,079) | 151,474 | - | 151,474 |
| 26 | Maintenance Expense | 388,614 | (202,184) | 186,430 | - | 186,430 |
| 27 | Depreciation and Amortization Expense | 2,014,048 | (121,167) | 1,892,881 | - | 1,892,881 |
| 28 | General Taxes - Property Taxes | 251,038 | (17,144) | 233,894 | 9,093 | 242,987 |
| 29 | General Taxes-Other | 86,320 | - | 86,320 | - | 86,320 |
| 30 | Income Taxes | 389,412 | 69,223 | 458,635 | 402,006 | 860,641 |
| 31 | Interest on Customer Deposits | - | - | - | - | - |
| 32 | Total Operating Expenses | <u>\$ 8,125,389</u> | <u>\$ (369,575)</u> | <u>\$ 7,755,813</u> | <u>\$ 420,609</u> | <u>\$ 8,176,422</u> |
| 33 | Operating Income (Loss) | <u>\$ 889,596</u> | <u>\$ 435,535</u> | <u>\$ 1,325,132</u> | <u>\$ 647,892</u> | <u>\$ 1,973,024</u> |

References:

Column (A): Company Schedule C-1
Column (B): Schedule JMM-13
Column (C): Column (A) + Column (B)
Column (D): Schedules JMM-22 and JMM-23
Column (E): Column (C) + Column (D)

SUMMARY OF OPERATING INCOME STATEMENT ADJUSTMENTS - TEST YEAR

| LINE NO. | DESCRIPTION | [A] COMPANY AS FILED | [B] Reverse Declining Usage Expense ADJ #1 | [C] Excessive Water Loss ADJ #2 | [D] Incentive Pay ADJ #3 | [E] Increase Purchase Water Expense ADJ #4 | [F] Expense Allocation ADJ #5 | [G] Conservation Expense ADJ #6 | [H] Tank Maintenance Expense ADJ #7 | [I] Depreciation Expense ADJ #8 | [J] Property Tax Expense ADJ #9 | [K] Income Tax Expense ADJ #10 | [L] RUCO ADJUSTED |
|----------|---------------------------------------|-------------------------|--|---------------------------------------|--------------------------------|--|-------------------------------------|---------------------------------------|---|---------------------------------------|---------------------------------------|--------------------------------------|----------------------|
| 1 | REVENUES: | | | | | | | | | | | | |
| 2 | Metered Water Sales | \$ 8,915,666 | \$ 65,980 | | | | | | | | | | \$ 8,981,616 |
| 3 | Water Sales-Unmetered | | | | | | | | | | | | |
| 4 | Other Operating Revenue | 99,329 | | | | | | | | | | | 99,329 |
| 5 | Intentionally Left Blank | | | | | | | | | | | | |
| 6 | Total Operating Revenues | \$ 9,014,985 | \$ 65,980 | | | | | | | | | | \$ 9,080,945 |
| 7 | | | | | | | | | | | | | |
| 8 | OPERATING EXPENSES: | | | | | | | | | | | | |
| 9 | Salaries and Wages | \$ 1,024,112 | \$ - | | \$ (14,080) | | | | | | | | \$ 1,010,022 |
| 10 | Purchased Water | 1,065,953 | 13,196 | (39,598) | | 87,678 | | | | | | | 1,127,229 |
| 11 | Fuel & Power | 605,885 | 7,501 | (2,048) | | | | | | | | | 611,340 |
| 12 | Fuel for Power Production | | | | | | | | | | | | |
| 13 | Chemicals | 119,266 | 1,476 | (4,084) | | | | | | | | | 116,658 |
| 14 | Waste Disposal | 7,113 | | | | | | | | | | | 7,113 |
| 15 | Intercompany Support Services | 94,150 | | | | | | | | | | | 94,150 |
| 16 | Corporate Allocation | 500,330 | | | | | | | | | | | 359,073 |
| 17 | Outside Services | 508,106 | | | | | (141,257) | | | | | | 508,106 |
| 18 | Group Insurance | 179,067 | | | | | | | | | | | 178,067 |
| 19 | Pensions | 85,086 | | | | | | | | | | | 85,086 |
| 20 | Regulatory Expense | 91,668 | | | | | | | | | | | 91,668 |
| 21 | Insurance Other Than Group | 73,025 | | | | | | | | | | | 73,025 |
| 22 | Customer Accounting | 318,959 | | | | | | | | | | | 318,959 |
| 23 | Rents | 1,504 | | | | | | | | | | | 1,504 |
| 24 | General Office Expense | 164,179 | | | | | | | | | | | 164,179 |
| 25 | Miscellaneous Expenses | 158,553 | | | | | | | | | | | 151,474 |
| 26 | Maintenance Expense | 388,614 | | | | | | | | | | | 186,430 |
| 27 | Depreciation and Amortization Expense | 2,014,048 | | | | | | | (202,184) | | | | 1,892,881 |
| 28 | General Taxes - Property Taxes | 251,038 | | | | | | | | (121,167) | | | 233,894 |
| 29 | General Taxes - Other | 86,320 | | | | | | | | | (17,144) | | 86,320 |
| 30 | Income Taxes | 389,412 | | | | | | | | | | 69,223 | 458,635 |
| 31 | Interest on Customer Deposits | | | | | | | | | | | | |
| 32 | Total Operating Expenses | \$ 8,125,389 | \$ 22,173 | \$ (45,728) | \$ (14,080) | \$ 87,678 | \$ (141,257) | \$ (7,079) | \$ (202,184) | \$ (121,167) | \$ (17,144) | \$ 69,223 | \$ 7,755,813 |
| 33 | Operating Income (Loss) | \$ 889,596 | \$ 43,787 | \$ 45,728 | \$ 14,080 | \$ (57,678) | \$ 141,257 | \$ 7,079 | \$ 202,184 | \$ 121,167 | \$ 17,144 | \$ (69,223) | \$ 1,325,132 |

OPERATING INCOME ADJUSTMENT NO. 1 - REVERSE DECLINING USAGE ADJUSTMENT

| LINE NO. | DESCRIPTION | [A] | [B] | [C] |
|-------------|---------------------|---------------------|---------------------|----------------------------------|
| | | COMPANY PROPOSED | RUCO ADJUSTMENTS | RUCO ¹ RECOMMENDED |
| 1 | Metered Water Sales | \$ 8,915,656 | \$ 65,960 | \$ 8,981,616 |
| 2 | | | | |
| 3 | Purchased Water | \$ 1,065,953 | \$ 13,196 | \$ 1,079,149 |
| 4 | | | | |
| 5 | Fuel and Power | \$ 605,885 | \$ 7,501 | \$ 613,386 |
| 6 | | | | |
| 7 | Chemicals | \$ 119,266 | \$ 1,476 | \$ 120,742 |
| 8 | | | | |

¹ Amounts may not reflect other adjustments.

REFERENCES:

Column [A]: Company Filing

Column [B]: Testimony JMM

Column [C]: Column [A] + Column [B]

OPERATING INCOME ADJUSTMENT NO. 2 - EXCESS WATER LOSS

| LINE NO. | DESCRIPTION | [A] | [B] | [C] |
|-------------|-----------------|---------------------|---------------------|----------------------------------|
| | | COMPANY PROPOSED | RUCO ADJUSTMENTS | RUCO ¹ RECOMMENDED |
| 1 | Purchased Water | \$ 1,065,953 | \$ (39,598) | \$ 1,026,355 |
| 2 | | | | |
| 3 | Fuel and Power | \$ 605,885 | \$ (2,046) | \$ 603,839 |
| 4 | | | | |
| 5 | Chemicals | \$ 119,266 | \$ (4,084) | \$ 115,182 |
| 6 | | | | |

¹ Amounts may not reflect other adjustments.

REFERENCES:

Column [A]: Company Filing

Column [B]: Testimony JMM

Column [C]: Column [A] + Column [B]

OPERATING INCOME ADJUSTMENT NO. 3 - INCENTIVE PAY

| LINE NO. | DESCRIPTION | [A] | [B] | [C] |
|-------------|--------------------|---------------------|---------------------|---------------------|
| | | COMPANY PROPOSED | RUCO ADJUSTMENTS | RUCO RECOMMENDED |
| 1 | Salaries and Wages | \$ 1,024,112 | \$ (14,090) | \$ 1,010,022 |

RUCO's Calculation of Incentive Pay

| | |
|---|------------------|
| Incentive pay included in labor expense | \$ 28,180 |
| Sharing between ratepayers and shareholders | 50.00% |
| Incentive pay | <u>\$ 14,090</u> |

REFERENCES:

Column [A]: Company Filing
Column [B]: Testimony JMM
Column [C]: Column [A] + Column [B]

OPERATING INCOME ADJUSTMENT NO. 4 - PURCHASED WATER EXPENSE

| LINE NO. | DESCRIPTION | [A] | | [B] | | [C] | |
|-------------|---|---------------------|-----------|---------------------|--------|----------------------------------|-----------|
| | | COMPANY PROPOSED | | RUCO ADJUSTMENTS | | RUCO ¹ RECOMMENDED | |
| 1 | Purchased Water | \$ | 1,065,953 | \$ | 87,678 | \$ | 1,153,631 |
| | RUCO's Calculation to Increase CAP M&I Charges | | | | | | |
| | Future CAP Charge 7,943.5 (a.f.) x \$20.80 (average of five years 20 + 21 + 21 + 21 + 21) | | | | | \$ | 165,225 |
| | Schedule CAP Allocation 6,861 (a.f.) x \$146.20 (average of five years 129 + 138 + 149 + 155 + 160) | | | | | | 1,003,078 |
| | Storage at MWD 917 (a.f.) *(\$16) | | | | | | (14,672) |
| | Projected CAP Costs | | | | | \$ | 1,153,631 |
| | Adjusted Test Year | | | | | \$ | 1,065,953 |
| | Recommended Adjustment | | | | | \$ | 87,678 |

¹ Amounts may not reflect other adjustments.

REFERENCES:

Column [A]: Company Filing
Column [B]: Testimony JMM
Column [C]: Column [A] + Column [B]

OPERATING INCOME ADJUSTMENT NO. 5 - CORPORATE ALLOCATION EXPENSE

| LINE NO. | DESCRIPTION | [A] COMPANY PROPOSED | [B] RUCO ADJUSTMENTS | [C] RUCO ¹ RECOMMENDED |
|----------|--|-------------------------|-------------------------|--------------------------------------|
| 1 | Corporate Allocation | \$ 500,330 | \$ (141,257) | \$ 359,073 |
| 2 | | | | |
| 3 | RUCO's Summary of Corporate Allocation Disallowances | | | |
| 4 | At-Risk Compensation | \$ 86,489 | | |
| 5 | Corporate Communications | \$ 6,687 | | |
| 6 | Operational Communications | \$ 2,532 | | |
| 7 | EPCOR Community Essentials Council | \$ 5,595 | | |
| 8 | Community Relations | \$ 23,222 | | |
| 9 | Corporate Communications | \$ 14,630 | | |
| | Additional Disallowance for (meal/entertainment, donations, promotions etc.) | \$ 2,102 | | |
| 10 | Total | \$ 141,257 | | |

¹ Amounts may not reflect other adjustments.

REFERENCES:

Column [A]: Company Filing

Column [B]: Testimony JMM

Column [C]: Column [A] + Column [B]

Chaparral City Water Company
Docket No. W-02113A-13-0118
Test Year Ended: December 31, 2012

Surrebuttal Schedule JMM-19

OPERATING INCOME ADJUSTMENT NO. 6 - REMOVE CONSERVATION EXPENSE

| LINE NO. | DESCRIPTION | [A] | [B] | [C] |
|-------------|------------------------|---------------------|---------------------|----------------------------------|
| | | COMPANY PROPOSED | RUCO ADJUSTMENTS | RUCO ¹ RECOMMENDED |
| 1 | Miscellaneous Expenses | \$ 158,553 | \$ (7,079) | \$ 151,474 |

¹ Amounts may not reflect other adjustments.

REFERENCES:

Column [A]: Company Filing
Column [B]: Testimony JMM
Column [C]: Column [A] + Column [B]

Chaparral City Water Company
Docket No. W-02113A-13-0118
Test Year Ended: December 31, 2012

Surrebuttal Schedule JMM-20

OPERATING INCOME ADJUSTMENT NO. 7 - REMOVE TANK MAINTENANCE EXPENSE

| LINE NO. | DESCRIPTION | [A] | [B] | [C] |
|-------------|---------------------|---------------------|---------------------|----------------------------------|
| | | COMPANY PROPOSED | RUCO ADJUSTMENTS | RUCO ¹ RECOMMENDED |
| 1 | Maintenance Expense | \$ 388,614 | \$ (202,184) | \$ 186,430 |

¹ Amounts may not reflect other adjustments.

REFERENCES:

Column [A]: Company Filing

Column [B]: Testimony JMM

Column [C]: Column [A] + Column [B]

OPERATING INCOME ADJUSTMENT NO. 7 - DEPRECIATION EXPENSE ON TEST YEAR PLANT

| LINE NO. | ACCT NO. | DESCRIPTION | [A] PLANT In SERVICE Per Staff | [B] NonDepreciable or Fully Depreciated PLANT | [C] DEPRECIABLE PLANT (Col A - Col B) | [D] DEPRECIATION RATE | [E] DEPRECIATION EXPENSE (Col C x Col D) |
|----------|----------|---|---|--|--|-----------------------------|---|
| 1 | 301 | Organization Cost | \$ - | \$ - | \$ - | 0.00% | \$ - |
| 2 | 302 | Franchise Cost | \$ - | \$ - | \$ - | 0.00% | \$ - |
| 3 | 303 | Land and Land Rights | \$ 1,554,591 | \$ 1,554,591 | \$ - | 0.00% | \$ - |
| 4 | 304 | Structures and Improvements | \$ 1,779,391 | \$ - | \$ 1,779,391 | 3.33% | \$ 59,254 |
| 5 | 305 | Collecting and Impounding Res. | \$ 1,013,959 | \$ - | \$ 1,013,959 | 2.50% | \$ 25,349 |
| 6 | 306 | Lake River and Other Intakes | \$ - | \$ - | \$ - | 2.50% | \$ - |
| 7 | 307 | Wells and Springs | \$ 159,627 | \$ - | \$ 159,627 | 3.33% | \$ 5,316 |
| 8 | 308 | Infiltration Galleries and Tunnels | \$ - | \$ - | \$ - | 6.67% | \$ - |
| 9 | 309 | Supply Mains | \$ 2,201,526 | \$ - | \$ 2,201,526 | 2.00% | \$ 44,031 |
| 10 | 310 | Power Generation Equipment | \$ - | \$ - | \$ - | 5.00% | \$ - |
| 11 | 311 | Electric Pumping Equipment | \$ 5,926,668 | \$ - | \$ 5,926,668 | 12.50% | \$ 740,834 |
| 12 | 320 | Water Treatment Plant | \$ - | \$ - | \$ - | 3.33% | \$ - |
| 13 | 320 | Water Treatment Equipment | \$ 6,551,094 | \$ - | \$ 6,551,094 | 3.33% | \$ 218,151 |
| 14 | 330 | Distribution Reservoirs and Standpipes | \$ 4,989,253 | \$ - | \$ 4,989,253 | 2.22% | \$ 110,761 |
| 15 | 331 | Transmission and Distribution Mains | \$ 24,390,732 | \$ - | \$ 24,390,732 | 2.00% | \$ 487,815 |
| 16 | 333 | Services | \$ 10,890,767 | \$ - | \$ 10,890,767 | 3.33% | \$ 362,663 |
| 17 | 334 | Meters | \$ 2,916,068 | \$ - | \$ 2,916,068 | 8.33% | \$ 242,908 |
| 18 | 335 | Hydrants | \$ 2,019,913 | \$ - | \$ 2,019,913 | 2.00% | \$ 40,398 |
| 19 | 336 | Backflow Prevention Devices | \$ - | \$ - | \$ - | 6.67% | \$ - |
| 20 | 339 | Other Plant and Miscellaneous Equipment | \$ 143,521 | \$ - | \$ 143,521 | 6.67% | \$ 9,573 |
| 21 | 340 | Office Furniture and Fixtures | \$ 305,068 | \$ - | \$ 305,068 | 6.67% | \$ 20,348 |
| 22 | 340.1 | Computer and Software | \$ - | \$ - | \$ - | 20.00% | \$ - |
| 23 | 341 | Transportation Equipment | \$ 417,314 | \$ - | \$ 417,314 | 20.00% | \$ 83,463 |
| 24 | 342 | Stores Equipment | \$ - | \$ - | \$ - | 4.00% | \$ - |
| 25 | 343 | Tools and Work Equipment | \$ 190,662 | \$ - | \$ 190,662 | 5.00% | \$ 9,533 |
| 26 | 344 | Laboratory Equipment | \$ - | \$ - | \$ - | 10.00% | \$ - |
| 27 | 345 | Power Operated Equipment | \$ - | \$ - | \$ - | 5.00% | \$ - |
| 28 | 346 | Communications Equipment | \$ 43,326 | \$ - | \$ 43,326 | 10.00% | \$ 4,333 |
| 29 | 347 | Miscellaneous Equipment | \$ - | \$ - | \$ - | 10.00% | \$ - |
| 30 | 348 | Other Tangible Plant | \$ 41,221 | \$ - | \$ 41,221 | 10.00% | \$ 4,122 |
| 31 | | Total Plant | \$ 65,534,701 | \$ 1,554,591 | \$ 63,980,110 | | \$ 2,468,851 |
| 32 | | Post Test Year Plant | | | | | |
| 34 | 307 | Wells and Springs | \$ 1,069,580 | \$ - | \$ 1,069,580 | 3.33% | \$ 35,617 |
| 35 | 311 | Electric Pumping Equipment | \$ - | \$ - | \$ - | 12.50% | \$ - |
| 36 | 320.2 | Water Treatment Equipment | \$ 73,035 | \$ - | \$ 73,035 | 3.33% | \$ 2,432 |
| 37 | 330.1 | Distribution Reservoirs and Standpipes | \$ 670,421 | \$ - | \$ 670,421 | 2.22% | \$ 14,883 |
| 38 | 331 | Transmission and Distribution Mains | \$ 66,964 | \$ - | \$ 66,964 | 2.00% | \$ 1,339 |
| 39 | 333 | Services | \$ - | \$ - | \$ - | 3.33% | \$ - |
| 40 | 334 | Meters | \$ - | \$ - | \$ - | 3.33% | \$ - |
| 41 | 335 | Hydrants | \$ - | \$ - | \$ - | 2.00% | \$ - |
| 42 | 339 | Other Plant and Miscellaneous Equipment | \$ 219,432 | \$ - | \$ 219,432 | 6.67% | \$ 14,636 |
| 43 | 341 | Transportation Equipment | \$ 9,637 | \$ - | \$ 9,637 | 20.00% | \$ 1,927 |
| 44 | 343 | Tools and Work Equipment | \$ 36,935 | \$ - | \$ 36,935 | 5.00% | \$ 1,847 |
| 45 | 346 | Communications Equipment | \$ 45,351 | \$ - | \$ 45,351 | 10.00% | \$ 4,535 |
| 46 | | Total Post Test Year Plant | \$ 2,191,355 | \$ - | \$ 2,191,355 | | \$ 77,217 |
| 47 | | | | | | | |
| 48 | | Total | \$ 67,726,056 | \$ 1,554,591 | \$ 66,171,465 | | \$ 2,546,068 |
| 49 | | | | | | | |
| 50 | | Composite Depreciation Rate: | | | | 3.85% | |
| 51 | | Contributions in Aid of Construction ("CIAC"): | | | | | \$ 14,991,871 |
| 52 | | Amortization of CIAC: | | | | | \$ 577,187 |
| 53 | | | | | | | |
| 54 | | Depreciation Expense before Amortization of CIAC: | | | | | \$ 2,546,068 |
| 55 | | Less Amortization of CIAC: | | | | | \$ 577,187 |
| 56 | | Less FHSD Adjustment Amortization: | | | | | \$ 76,000 |
| 57 | | Test Year Depreciation Expense - RUCO | | | | | \$ 1,892,881 |
| 58 | | | | | | | |
| 59 | | Depreciation Expense - Company | | | | | \$ 2,014,048 |
| 60 | | | | | | | |
| 61 | | RUCO's Removal of Deferred CAP Charges | | | | | \$ (15,641) |
| 62 | | | | | | | |
| 63 | | RUCO's Removal of 24 month AFUDC and Depreciation Expense | | | | | \$ (23,586) |
| 64 | | | | | | | |
| 65 | | Adjusted Depreciation Expense | | | | | \$ 1,974,821 |
| 66 | | | | | | | |
| 67 | | RUCO's Adjustment to Depreciation Expense | | | | | \$ (81,940) |
| 68 | | | | | | | |
| 69 | | Total Adjustment (lines 61 + 63 + 69) | | | | | \$ (121,167) |
| 70 | | | | | | | |

References:

Column [A]: Schedule JMM-11
Column [B]: From Column [A]
Column [C]: Column [A] - Column [B]
Column [D]: Staff's Typical Engineering Depreciation Rates
Column [E]: Column [C] x Column [D]

OPERATING INCOME ADJUSTMENT NO. 9 - PROPERTY TAX EXPENSE

| LINE NO. | | [A] RUCO AS ADJUSTED | [B] RUCO RECOMMENDED |
|----------|---|----------------------------|----------------------------|
| 1 | Property Tax Calculation | | |
| 1 | RUCO Adjusted Test Year Revenues | \$ 9,080,945 | \$ 9,080,945 |
| 2 | Weight Factor | 2 | 2 |
| 3 | Subtotal (Line 1 * Line 2) | 18,161,890 | \$ 18,161,890 |
| 4 | RUCO Recommended Revenue, Per Schedule JMM-1 | 9,080,945 | \$ 10,149,446 |
| 5 | Subtotal (Line 4 + Line 5) | 27,242,835 | 28,311,336 |
| 6 | Number of Years | 3 | 3 |
| 7 | Three Year Average (Line 5 / Line 6) | 9,080,945 | \$ 9,437,112 |
| 8 | Department of Revenue Multiplier | 2 | 2 |
| 9 | Revenue Base Value (Line 7 * Line 8) | 18,161,890 | \$ 18,874,224 |
| 10 | Plus: 10% of CWIP - | 161,294 | 161,294 |
| 11 | Less: Net Book Value of Licensed Vehicles | - | \$ - |
| 12 | Full Cash Value (Line 9 + Line 10 - Line 11) | 18,323,184 | \$ 19,035,518 |
| 13 | Assessment Ratio | 18.5% | 18.5% |
| 14 | Assessment Value (Line 12 * Line 13) | 3,389,789 | \$ 3,521,571 |
| 15 | Composite Property Tax Rate (Per Company Schedule) | 6.9000% | 6.9000% |
| 16 | | | \$ - |
| 17 | RUCO Test Year Adjusted Property Tax (Line 14 * Line 15) | \$ 233,894 | |
| 18 | Company Proposed Property Tax | 251,038 | |
| 19 | | | |
| 20 | RUCO Test Year Adjustment (Line 16-Line 17) | \$ (17,144) | |
| 21 | Property Tax - RUCO Recommended Revenue (Line 14 * Line 15) | | \$ 242,987 |
| 22 | RUCO Test Year Adjusted Property Tax Expense (Line 16) | | \$ 233,894 |
| 23 | Increase in Property Tax Expense Due to Increase in Revenue Requirement | | \$ 9,093 |
| 24 | | | |
| 25 | Increase to Property Tax Expense | | \$ 9,093 |
| 26 | Increase in Revenue Requirement | | 1,068,501 |
| 27 | Increase to Property Tax per Dollar Increase in Revenue (Line 19/Line 20) | | 0.850996% |

REFERENCES:

Column [A]: Company Filing
Column [B]: Testimony JMM
Column [C]: Column [A] + Column [B]

OPERATING INCOME ADJUSTMENT NO. 10 - TEST YEAR INCOME TAXES

| LINE NO. | DESCRIPTION | |
|-------------|--|---------------------------|
| 1 | | |
| 2 | | |
| 3 | | |
| 4 | <u>Calculation of Income Tax:</u> | |
| 5 | Revenue (Schedule JMM-1) | Test Year \$ 9,080,945 |
| 6 | Operating Expenses Excluding Income Taxes | \$ 7,297,178 |
| 7 | Synchronized Interest | \$ 585,973 |
| 8 | Arizona Taxable Income | \$ 1,197,794 |
| 9 | Arizona State Income Tax Rate | 6.5000% |
| 10 | Arizona Income Tax | \$ 77,857 |
| 11 | Federal Taxable Income | \$ 1,119,937 |
| 12 | Federal Tax on First Income Bracket (\$1 - \$50,000) @ 15% | \$ 7,500 |
| 13 | Federal Tax on Second Income Bracket (\$51,001 - \$75,000) @ 25% | \$ 6,250 |
| 14 | Federal Tax on Third Income Bracket (\$75,001 - \$100,000) @ 34% | \$ 8,500 |
| 15 | Federal Tax on Fourth Income Bracket (\$100,001 - \$335,000) @ 39% | \$ 91,650 |
| 16 | Federal Tax on Fifth Income Bracket (\$335,001 - \$10,000,000) @ 34% | \$ 266,879 |
| 17 | Total Federal Income Tax | \$ 380,779 |
| 18 | Combined Federal and State Income Tax | \$ 458,635 |
| 19 | | |
| 20 | | |
| 21 | <u>Calculation of Interest Synchronization:</u> | |
| 22 | Rate Base (Schedule JMM-4) | \$ 24,724,611 |
| 23 | Weighted Average Cost of Debt | 2.37% |
| 24 | Synchronized Interest | \$ 585,973 |
| 25 | | |
| 26 | | |
| 27 | Income Tax - Per RUCO | \$ 458,635 |
| 28 | Income Tax - Per Company | \$ 389,412 |
| 29 | RUCO Adjustment | \$ 69,223 |

REFERENCES:

Column [A]: Company Filing
Column [B]: Testimony JMM
Column [C]: Column [A] + Column [B]

Rate Design

| Monthly Usage Charge | Present | Company Proposed Rates | RUCO Recommended Rates |
|--|-----------|---------------------------|---------------------------|
| <u>Meter Size (All Classes):</u> | | | |
| Chaparral Residential 3/4 Inch | \$ 16.50 | \$ 22.20 | \$ 18.20 |
| Chaparral Residential 1 Inch | 27.50 | 37.03 | 30.56 |
| Chaparral Residential 1-1/2 Inch | 55.00 | 74.06 | 61.13 |
| Chaparral Residential 2 Inch | 88.00 | 118.49 | 97.80 |
| Chaparral Residentail 3 Inch | 176.00 | 236.98 | 195.60 |
| Chaparral Residentail 4 Inch | 275.00 | 370.29 | 305.62 |
| Chaparral Residentail 6 Inch | 550.00 | 740.58 | 611.25 |
| Chaparral Residentail 8 Inch | 880.00 | 1,184.92 | 978.00 |
| Chaparral Residentail 10 Inch | 1,265.00 | 1,703.32 | 1,405.87 |
| Chaparral Residentail 12 Inch | 2,365.00 | 3,184.47 | 2,628.36 |
| Chaparral Commercial 3/4 Inch | 16.50 | 22.22 | 18.20 |
| Chaparral Commercial 1 Inch | 27.50 | 37.03 | 30.56 |
| Chaparral Commercial 1.5 Inch | 55.00 | 74.06 | 61.13 |
| Chaparral Commercial 2 Inch | 88.00 | 118.49 | 97.80 |
| Chaparral Commercial 3 Inch | 176.00 | 236.98 | 195.60 |
| Chaparral Commercial 4 Inch | 275.00 | 370.29 | 305.62 |
| Chaparral Commercial 6 Inch | 550.00 | 740.58 | 611.25 |
| Chaparral Commercial 8 Inch | 880.00 | 1,184.92 | 978.00 |
| Chaparral Commercial 10 Inch | 1,265.00 | 1,703.32 | 1,405.87 |
| Chaparral Commercial 12 Inch | 2,365.00 | 3,184.47 | 2,628.36 |
| Chaparral Irrigation 3/4 Inch | 16.50 | 22.22 | 18.20 |
| Chaparral Irrigation 1 Inch | 27.50 | 37.03 | 30.56 |
| Chaparral Irrigation 1.5 Inch | 55.00 | 74.06 | 61.13 |
| Chaparral Irrigation 2 Inch | 88.00 | 118.49 | 97.80 |
| Chaparral Irrigation 3 Inch | 176.00 | 236.98 | 195.60 |
| Chaparral Irrigation 4 Inch | 275.00 | 370.29 | 305.62 |
| Chaparral Irrigation 6 Inch | 550.00 | 740.58 | 611.25 |
| Chaparral Irrigation 8 Inch | 880.00 | 1,184.92 | 978.00 |
| Chaparral Irrigation 10 Inch | 1,265.00 | 1,703.32 | 1,405.87 |
| Chaparral Irrigation 12 Inch | 2,365.00 | 3,184.47 | 2,628.36 |
| Chaparral Hydrant 3/4 Inch | 16.50 | 22.22 | 18.20 |
| Chaparral Hydrant 1 Inch | 27.50 | 37.03 | 30.56 |
| Chaparral Hydrant 1.5 Inch | 55.00 | 74.06 | 61.13 |
| Chaparral Hydrant 2 Inch | 88.00 | 118.49 | 97.80 |
| Chaparral Hydrant 3 Inch | 176.00 | 236.98 | 195.60 |
| Chaparral Hydrant 4 Inch | 275.00 | 370.29 | 305.62 |
| Chaparral Hydrant 6 Inch | 550.00 | 740.58 | 611.25 |
| Chaparral Hydrant 8 Inch | 880.00 | 1,184.92 | 978.00 |
| Chaparral Hydrant 10 Inch | 1,265.00 | 1,703.32 | 1,405.87 |
| Chaparral Hydrant 12 Inch | 2,365.00 | 3,184.47 | 2,628.36 |
| Chaparral Fire Sprinklers (All Meter Sizes) | 10.0000 | 13.47 | 13.47 |
| Chaparral Low Income 3/4 Inch | N/A | 14.70 | 10.70 |
| Chaparral Low Income 1 Inch | N/A | 29.53 | 23.06 |
| <u>Commodity Charge - Per 1,000 Gallons</u> | | | |
| <u>3/4" Meter (Residential)</u> | | | |
| First 3,000 gallons | \$ 2.3100 | \$ 3.0926 | \$ 2.5900 |
| 3,001 to 9,000 gallons | 2.9600 | 3.9678 | 3.3200 |
| All gallons over 9,000 | 3.6100 | 4.8431 | 4.0600 |
| <u>3/4" Meter (Commercial)</u> | | | |
| First 9,000 gallons | 2.9600 | 3.9678 | 3.3200 |
| Over 9,000 gallons | 3.6100 | 4.8431 | 4.0600 |
| <u>1" Meter (Residential and Commercial)</u> | | | |
| First 24,000 gallons | 2.9600 | 3.9678 | 3.3200 |
| Over 24,000 gallons | 3.6100 | 4.8431 | 4.0600 |
| <u>1.5" Meter (Residential and Commercial)</u> | | | |
| First 60,000 gallons | 2.9600 | 3.9678 | 3.3200 |
| Over 60,000 gallons | 3.6100 | 4.8431 | 4.0600 |
| <u>2" Meter (Residential and Commercial)</u> | | | |
| First 100,000 gallons | 2.9600 | 3.9678 | 3.3200 |
| Over 100,000 gallons | 3.6100 | 4.8431 | 4.0600 |
| <u>3" Meter (Residential and Commercial)</u> | | | |
| First 225,000 gallons | 2.9600 | 3.9678 | 3.3200 |
| Over 225,000 gallons | 3.6100 | 4.8431 | 4.0600 |

Rate Design

| | | | |
|---|--------|--------|--------|
| <u>4" Meter (Residential and Commercial)</u> | | | |
| First 350,000 gallons | 2.9600 | 3.9678 | 3.3200 |
| Over 350,000 gallons | 3.6100 | 4.8431 | 4.0600 |
| <u>6" Meter (Residential and Commercial)</u> | | | |
| First 725,000 gallons | 2.9600 | 3.9678 | 3.3200 |
| Over 725,000 gallons | 3.6100 | 4.8431 | 4.0600 |
| <u>8" Meter (Residential and Commercial)</u> | | | |
| First 1,125,000 gallons | 2.9600 | 3.9678 | 3.3200 |
| Over 1,125,000 gallons | 3.6100 | 4.8431 | 4.0600 |
| <u>10" Meter (Residential and Commercial)</u> | | | |
| First 1,500,000 gallons | 2.9600 | 3.9678 | 3.3200 |
| Over 1,500,000 gallons | 3.6100 | 4.8431 | 4.0600 |
| <u>12" Meter (Residential and Commercial)</u> | | | |
| First 2,250,000 gallons | 2.9600 | 3.9678 | 3.3200 |
| Over 2,250,000 gallons | 3.6100 | 4.8431 | 4.0600 |
| <u>3/4" Meter (Irrigation and Hydrant)</u> | | | |
| All Usage | 2.9600 | 3.9678 | 3.3200 |
| <u>1" Meter (Irrigation and Hydrant)</u> | | | |
| All Usage | 2.9600 | 3.9678 | 3.3200 |
| <u>1.5" Meter (Irrigation and Hydrant)</u> | | | |
| All Usage | 2.9600 | 3.9678 | 3.3200 |
| <u>2" Meter (Irrigation and Hydrant)</u> | | | |
| All Usage | 2.9600 | 3.9678 | 3.3200 |
| <u>3" Meter (Irrigation and Hydrant)</u> | | | |
| All Usage | 2.9600 | 3.9678 | 3.3200 |
| <u>4" Meter (Irrigation and Hydrant)</u> | | | |
| All Usage | 2.9600 | 3.9678 | 3.3200 |
| <u>6" Meter (Irrigation and Hydrant)</u> | | | |
| All Usage | 2.9600 | 3.9678 | 3.3200 |
| <u>8" Meter (Irrigation and Hydrant)</u> | | | |
| All Usage | 2.9600 | 3.9678 | 3.3200 |
| <u>10" Meter (Irrigation and Hydrant)</u> | | | |
| All Usage | 2.9600 | 3.9678 | 3.3200 |
| <u>12" Meter (Irrigation and Hydrant)</u> | | | |
| All Usage | 2.9600 | 3.9678 | 3.3200 |
| Fire Sprinklers (All Meter Sizes) | 2.9600 | 3.9678 | 3.3200 |
| Standpipe Water Service - 2 Inch | 2.9600 | 3.9678 | 3.3200 |
| Low Income 3/4 Inch | | | |
| First 3,000 gallons | N/A | 3.0926 | 2.5900 |
| 3,001 to 9,000 gallons | N/A | 3.9678 | 3.3200 |
| All gallons over 9,000 | N/A | 4.8431 | 4.0600 |
| Low Income 3/4 Inch | | | |
| First 3,000 gallons | N/A | 3.0926 | 2.5900 |
| 3,001 to 9,000 gallons | N/A | 3.9678 | 3.3200 |
| All gallons over 9,000 | N/A | 4.8431 | 4.0600 |

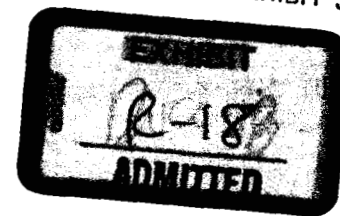
Typical Bill Analysis
General Service 3/4-Inch Meter

| Company Proposed | Gallons | Present Rates | Proposed Rates | Dollar Increase | Percent Increase |
|-------------------------|---------|---------------|----------------|-----------------|------------------|
| Average Usage | 7,870 | \$ 37.85 | \$ 50.80 | \$ 12.96 | 34.23% |
| Median Usage | 4,892 | \$ 29.03 | \$ 38.98 | \$ 9.95 | 34.29% |
| RUCO Recommended | | | | | |
| Average Usage | 7,870 | \$ 37.85 | \$ 42.14 | \$ 4.29 | 11.34% |
| Median Usage | 4,892 | \$ 29.03 | \$ 32.25 | \$ 3.22 | 11.10% |

Present & Proposed Rates (Without Taxes)
General Service 3/4-Inch Meter

| Gallons Consumption | Present Rates | Company Proposed Rates | % Increase | RUCO Recommended Rates | % Increase |
|---------------------|---------------|------------------------|------------|------------------------|------------|
| - | \$ 16.50 | \$ 22.20 | 34.55% | \$ 18.20 | 10.30% |
| 1,000 | 18.81 | 25.29 | 34.46% | 20.79 | 10.53% |
| 2,000 | 21.12 | 28.39 | 34.40% | 23.38 | 10.70% |
| 3,000 | 23.43 | 31.48 | 34.35% | 25.97 | 10.84% |
| 4,000 | 26.39 | 35.45 | 34.31% | 29.29 | 10.99% |
| 5,000 | 29.35 | 39.41 | 34.29% | 32.61 | 11.11% |
| 6,000 | 32.31 | 43.38 | 34.27% | 35.93 | 11.20% |
| 7,000 | 35.27 | 47.35 | 34.25% | 39.25 | 11.28% |
| 8,000 | 38.23 | 51.32 | 34.23% | 42.57 | 11.35% |
| 9,000 | 41.19 | 55.28 | 34.22% | 45.89 | 11.41% |
| 10,000 | 44.80 | 60.13 | 34.21% | 49.95 | 11.50% |
| 11,000 | 48.41 | 64.97 | 34.21% | 54.01 | 11.57% |
| 12,000 | 52.02 | 69.81 | 34.21% | 58.07 | 11.63% |
| 13,000 | 55.63 | 74.66 | 34.20% | 62.13 | 11.68% |
| 14,000 | 59.24 | 79.50 | 34.20% | 66.19 | 11.73% |
| 15,000 | 62.85 | 84.34 | 34.20% | 70.25 | 11.77% |
| 16,000 | 66.46 | 89.19 | 34.20% | 74.31 | 11.81% |
| 17,000 | 70.07 | 94.03 | 34.19% | 78.37 | 11.85% |
| 18,000 | 73.68 | 98.87 | 34.19% | 82.43 | 11.88% |
| 19,000 | 77.29 | 103.72 | 34.19% | 86.49 | 11.90% |
| 20,000 | 80.90 | 108.56 | 34.19% | 90.55 | 11.93% |
| 25,000 | 98.95 | 132.77 | 34.18% | 110.85 | 12.03% |
| 30,000 | 117.00 | 156.99 | 34.18% | 131.15 | 12.09% |
| 35,000 | 135.05 | 181.21 | 34.18% | 151.45 | 12.14% |
| 40,000 | 153.10 | 205.42 | 34.17% | 171.75 | 12.18% |
| 45,000 | 171.15 | 229.64 | 34.17% | 192.05 | 12.21% |
| 50,000 | 189.20 | 253.85 | 34.17% | 212.35 | 12.24% |
| 75,000 | 279.45 | 374.93 | 34.17% | 313.85 | 12.31% |
| 100,000 | 369.70 | 496.01 | 34.16% | 415.35 | 12.35% |

Chaparral City Water Company
Docket No. W-02113A-13-0118
Test Year Ended December 31, 2012



LINE

NO. CALCULATION OF OVERALL SIB REVENUE REQUIREMENT AND EFFICIENCY CREDIT

| | | |
|----|--|-------------|
| 1 | Total Authorized Revenue Requirement, Per Decision xxxxx, See Attached Schedules | TBD |
| 2 | SIB Revenue CAP percentage | 5% Per Year |
| 3 | SIB Revenue CAP | TBD |
| 4 | SIB Eligible Plant - Per SIB Table II, net of retirements | TBD |
| 5 | Total Revenue Requirement, (with pro forma SIB investments). See attached revenue requirements schedules as provided by Company. | TBD |
| 6 | SIB Revenue Requirement (line 5 minus line 1) | TBD |
| 7 | SIB Revenue Requirement Efficiency Credit | 5% |
| 8 | SIB True-Up Adjustment (from SIB Schedule B) | TBD |
| 9 | SIB Authorized Revenue (line 6 plus line 7 plus line 8) | TBD |
| 10 | Number of Equivalent Meters, below | TBD |
| 11 | Charge per 5/8" meter | TBD |

| | No. of Customers at Year End | Multipliers | 5/8 x 3/4-inch Equivalent Meters | Fixed Surcharge | Annual Rev by Meter Size |
|----------------|------------------------------------|-------------|--|--------------------|--------------------------------|
| 5/8 x 3/4-inch | TBD | 1 | TBD | TBD | TBD |
| 3/4-inch | TBD | 1.5 | TBD | TBD | TBD |
| 1-inch | TBD | 2.5 | TBD | TBD | TBD |
| 1 1/2-inch | TBD | 5 | TBD | TBD | TBD |
| 2-inch | TBD | 8 | TBD | TBD | TBD |
| 3-inch | TBD | 16 | TBD | TBD | TBD |
| 4-inch | TBD | 25 | TBD | TBD | TBD |
| 6-inch | TBD | 50 | TBD | TBD | TBD |
| 8-inch | TBD | 80 | TBD | TBD | TBD |
| 10-inch | TBD | 115 | TBD | TBD | TBD |
| Totals | TBD | | TBD | | TBD |



0000146184

BEFORE THE ARIZONA CORPORATION

COMMISSIONERS

Arizona Corporation Commission

DOCKETED

JUN 27 2013

BOB STUMP - Chairman
GARY PIERCE
BRENDA BURNS
BOB BURNS
SUSAN BITTER SMITH

DOCKETED BY

nr

IN THE MATTER OF THE APPLICATION OF
ARIZONA WATER COMPANY, AN ARIZONA
CORPORATION, FOR A DETERMINATION OF
THE FAIR VALUE OF ITS UTILITY PLANT AND
PROPERTY AND FOR ADJUSTMENTS TO ITS
RATES AND CHARGES FOR UTILITY SERVICE
FURNISHED BY ITS EASTERN GROUP AND
FOR CERTAIN RELATED APPROVALS.

DOCKET NO. W-01445A-11-0310

DECISION NO. 73938

PHASE 2
OPINION AND ORDER

DATE OF HEARING:

April 8 and 11, 2013

PLACE OF HEARING:

Phoenix, Arizona

ADMINISTRATIVE LAW JUDGE:

Dwight D. Nodes

APPEARANCES:

Mr. Steven A. Hirsch, BRYAN CAVE LLP, on behalf
of Arizona Water Company;

Mr. Timothy J. Sabo, ROSHKA DEWULF & PATTEN,
PLC, on behalf of Global Water Utilities;

Mr. Michael T. Hallam, LEWIS AND ROCA LLP, on
behalf of EPCOR Water Arizona, Inc.;

Mr. Michael M. Grant, GALLAGHER & KENNEDY,
P.A., on behalf of Arizona Investment Council;

Mr. Jay L. Shapiro, FENNEMORE CRAIG, P.C., on
behalf of Rio Rico Utilities, Inc. dba Liberty Utilities;

Mr. Garry Hays, LAW OFFICES OF GARRY HAYS,
on behalf of the City of Globe;

Mr. Greg Patterson, on behalf of the Water Utilities
Association of Arizona;

Mr. Daniel W. Pozefsky, Chief Counsel, on behalf of
the Residential Utility Consumer Office; and

Ms. Bridget A. Humphrey and Mr. Wesley Van Cleve,
Staff Attorneys, Legal Division, on behalf of the
Utilities Division of the Arizona Corporation
Commission.

ARIZONA WATER COMPANY

PHASE 2--EASTERN GROUP GENERAL RATE CASE

SETTLEMENT AGREEMENT
REGARDING DISTRIBUTION SYSTEM IMPROVEMENT CHARGE ("DSIC")
AND OTHER DSIC-LIKE PROPOSALS

Docket No. W-01445A-11-0310

DECISION NO. 73938

SETTLEMENT AGREEMENT ON DSIC AND DSIC-LIKE PROPOSALS
AND
LIST OF SIGNATORY PARTIES

The purpose of this Settlement Agreement ("Agreement") is to settle specific, identified remaining issues related to Phase 2 of Docket No. W-01445A-11-0310, Arizona Water Company's ("AWC" or "Company") application to increase rates for its Eastern Group of systems as identified in its August 5, 2011 application ("Rate Case"). These remaining issues relate to a DSIC proposal presented by AWC in the Rate Case and the parties' responses to that proposal, including presentation of DSIC-like proposals. This Agreement is entered into by the following entities:

Arizona Water Company

Arizona Corporation Commission Utilities Division ("Staff")

Global Water – Palo Verde Utilities Company, Global Water – Santa Cruz Water Company, Valencia Water Company- Town Division, Valencia Water Company – Greater Buckeye Division, Water Utility of Greater Tonopah, Willow Valley Water Co. and Water Utility of Northern Scottsdale (collectively the "Global Utilities")

EPCOR Water Arizona Inc.

Rio Rico Utilities, Inc. dba Liberty Utilities ("Liberty Utilities")

The Water Utility Association of Arizona ("WUAA")

Arizona Investment Council ("AIC")

These entities shall be referred to collectively as the "Signatory Parties."

6.4.3 Services, including Service Connections;

6.4.4 Valves and Valve Structures;

6.4.5 Meters and Meter Installations;

6.4.6 Hydrants

6.5 With a request to modify or add projects to SIB Plant Table I, AWC shall provide a proposed order for Commission consideration. Staff and RUCO shall have 30 days to object to the projects AWC is seeking to include in its revised SIB Plant Table I. Staff shall promptly process AWC's request and shall docket any Staff recommendations to the Commission within thirty days after AWC has filed its request. If there is no objection to AWC's request, that request shall be placed on an open meeting agenda at the earliest practical date.

7.0 SIB SURCHARGE FILING REQUIREMENTS

7.1 For ratemaking purposes and for all purposes of this Agreement, the Signatory Parties agree that AWC shall include the following information with each SIB surcharge filing:

7.1.1 A schedule (an example of which is attached hereto as Exhibit C, SIB Plant Table II) showing the SIB eligible projects completed for which AWC seeks cost recovery. Such projects must 1) be projects set forth in AWC's initial SIB Plant Table I or have been added to said SIB Plant Table I pursuant to Section 6.0 of this agreement; 2) have been completed by AWC; and 3) be actually serving customers.

7.1.2 SIB Schedule A (an example of which is attached hereto as Exhibit D), showing a calculation of the SIB revenue requirement and SIB efficiency credit, as well as the individual SIB fixed surcharge calculation;

7.1.3 SIB Schedule B (an example of which is attached hereto as Exhibit B), showing the overall SIB revenue true-up calculation for the prior twelve-month SIB surcharge period, as well as the individual SIB fixed true-up surcharge or credit calculation;

7.1.4 SIB Schedule C (an example of which is attached hereto as Exhibit E) showing the effect of the SIB surcharge on a typical residential customer bill;

7.1.5 SIB Plant Table II, summarizing SIB-eligible projects completed and included in the current SIB surcharge filing.

7.1.6 SIB Plant Table I (an example of which is attached hereto as Exhibit A), summarizing SIB-eligible projects contemplated for the next twelve (12)-month SIB surcharge period.

ARIZONA WATER COMPANY

Docket No. W-01445A-11-0310

Calculation of Overall SIB Revenue Requirement and Individual Surcharge

As of December 31, 2012

SIB Schedule A

| Line No. | CALCULATION OF OVERALL SIB REVENUE REQUIREMENT & EFFICIENCY CREDIT | |
|----------|--|------------|
| | (A) | (B) |
| 1 | SUPERSTITION | |
| 2 | \$ 17,848,923 | |
| 3 | | |
| 4 | 5.00% | |
| 5 | | \$ 892,446 |
| 6 | | |
| 7 | \$ 2,000,000 | |
| 8 | 27,700 | |
| 9 | | |
| 10 | \$ 1,972,300 | |
| 11 | | |
| 12 | 8.72% | |
| 13 | | |
| 14 | \$ 171,985 | |
| 15 | | |
| 16 | 1,6590 | |
| 17 | | |
| 18 | \$ 285,322 | |
| 19 | | |
| 20 | 2.77% | |
| 21 | | |
| 22 | \$ 55,400 | |
| 23 | | |
| 24 | \$ 5,000 | |
| 25 | | |
| 26 | \$ 50,400 | |
| 27 | | |
| 28 | | |
| 29 | \$ 335,722 | |
| 30 | | |
| 31 | \$ | |
| 32 | | |
| 33 | | |
| 34 | | |
| 35 | \$ 335,722 | |
| 36 | | |
| 37 | -5.00% | |
| 38 | | |
| 39 | \$ (16,766) | |
| 40 | | |
| 41 | | |
| 42 | | |
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DECISION NO. 73938



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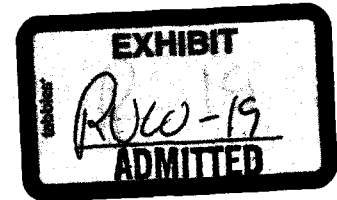
BEFORE THE ARIZONA CORPORATION

COMMISSIONERS

Arizona Corporation Commission

DOCKETED

JAN 29 2014



BOB STUMP - Chairman
GARY PIERCE
BRENDA BURNS
BOB BURNS
SUSAN BITTER SMITH

DOCKETED BY

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IN THE MATTER OF THE APPLICATION OF
NEW RIVER UTILITY COMPANY, AN
ARIZONA CORPORATION, FOR A
DETERMINATION OF THE FAIR VALUE OF ITS
UTILITY PLANT AND PROPERTY AND FOR
INCREASES IN ITS WATER RATES AND
CHARGES FOR UTILITY SERVICE BASED
THEREON.

DOCKET NO. W-01737A-12-0478

DECISION NO. 74294OPINION AND ORDER

DATES OF HEARING:

September 4, 2013 (Pre-hearing conference); September
9, 2013 (public comment); September 12 and 13, 2013.

PLACE OF HEARING:

Phoenix, Arizona

ADMINISTRATIVE LAW JUDGE:

Sarah N. Harpring

APPEARANCES:

Mr. Jeffrey W. Crockett, BROWNSTEIN HYATT
FARBER SCHRECK, LLP, on behalf of Applicant; and

Mr. Brian E. Smith and Mr. Scott M. Hesla, Staff
Attorneys, Legal Division, on behalf of the Utilities
Division of the Arizona Corporation Commission.

This case concerns an application for a permanent rate increase filed by New River Utility Company ("New River"), an Arizona "S" corporation and Class B water utility providing service to approximately 2,900 connections in Peoria, Arizona. New River's application uses a test year ending December 31, 2011 ("TY"). For the TY, New River reported adjusted gross revenues of \$1,260,429 and operating income of \$116,225. New River is requesting an overall gross revenue increase of \$761,820, or 60.44 percent, which New River stated would produce operating income of \$586,849 and would represent an 8.72-percent return on an adjusted fair value rate base ("FVRB") of \$6,729,925.

1 b. Tank Painting

2 New River has proposed to include \$31,333 in normalized TY tank painting expenses,
3 pursuant to a plan to have all of New River's steel storage tanks painted within the next six years at a
4 total cost of \$470,000, which would be amortized over a 15-year period. (See Tr. at 29-30; Ex. A-3
5 at 18-19; Ex. A-4 at 10-11.) New River asserted that the recovery of tank recoating costs is critical
6 because New River's tanks are at or approaching the age when they require their first recoating.
7 (Jones Dir. at 12.) New River also stated that the storage tank and hydropneumatic tank at the 78th
8 Lane Booster Plant were due for recoating in 2012, but that New River was forced to postpone the
9 recoating due to insufficient available funds. (*Id.*) To support its request, New River provided a
10 copy of a written proposal prepared by Arizona Coating Applicators Inc. ("ACAI") on May 2, 2013,
11 in which ACAI proposed to clean and paint the exterior and to clean, paint, and disinfect the interior
12 of one 106' x 16' existing water tank (built and last painted in 1997) for the quoted price of \$130,000.
13 (Ex. A-20.) ACAI's proposal stated that the quote was valid for 90 days. (*Id.*) Mr. Jones testified
14 that the ACAI proposal was for the storage tank at the 78th Lane Booster Plant and that Mr. Fletcher
15 had called ACAI's president on May 7, 2013, and accepted the proposal for the work to be done in
16 winter 2013, when the weather cooled, as indicated by a notation written by Mr. Fletcher on the
17 ACAI proposal. (See Tr. at 116-18, 123-24; Ex. A-20.) Mr. Jones testified that, based on his
18 management experience, he believed there was a contract between Mr. Fletcher and ACAI to have
19 the recoating work done. (See Tr. at 123-24.) Mr. Jones testified that because New River plans to
20 have all of the tanks repainted within six years, and to obtain recovery of the expenses over 15 years,
21 New River will be expending \$313,335 more for tank painting in the first six years than it would
22 recover in those same six years, and New River would not be made whole until 2027. (Ex. A-4 at 10-
23 11.)

24 Staff has recommended that the proposed expense be denied because it is not a historical cost,
25 the amount is not known and measurable, and Staff believes that the cash flow recommended by Staff
26 would provide enough revenue for New River to complete the tank painting without inclusion of the
27 proposed pro forma expense adjustment. (Tr. at 293.) Ms. Brown stated that if recovery were
28 allowed for the \$130,000 in work described in the ACAI proposal, it "would be tantamount to single-

1 item ratemaking where the expense is not properly matched to the expenses of the same period,”
 2 because only the tank painting expense would be considered, not any reductions in other expenses or
 3 any changes in revenues in 2013. (*Id.* at 294.) Ms. Brown stated that the “mismatch would not
 4 necessarily be fair to ratepayers.” (*Id.*) Ms. Brown also stated that she believed the reason New
 5 River sought recovery for this future expense is because New River’s owners have taken all of the
 6 money out of New River. (*See* Tr. at 315-16.) Staff did not dispute that water tanks need to be
 7 recoated approximately every 15 years or that New River’s water tanks need to be recoated and did
 8 not dispute the reasonableness of the \$130,000 cost included in the proposal made by ACAI. (Tr. at
 9 192-94, 314, 329.)

10 On brief, New River argued that the Commission had recently allowed recovery of
 11 normalized tank recoating expenses, based upon cost projections, for Arizona-American Water
 12 Company’s Agua Fria Division in Decision No. 73145.³⁹ (Resp. Br. at 17.) New River asserted that
 13 it was requesting “the very same normalized tank recoating expense in this case.” (*Id.*) We do not
 14 find this argument compelling, considering that Decision No. 73145 involved Commission approval
 15 of a Settlement Agreement and did not include any findings of fact regarding normalized tank
 16 recoating expense.⁴⁰ (*See* Decision No. 73145.)

17 While the Commission’s rules require a utility to use a historical test year for its rate case,
 18 they also allow for pro forma adjustments to actual test year figures “to obtain a normal or more
 19 realistic relationship between revenues, expenses and rate base.” (*See* A.A.C. R14-2-103(A)(3)(i),
 20 App. C.) The Commission allows such adjustments to be made for future expenses when there is
 21 evidence establishing that the future expenses are known and measurable. In this case, the evidence
 22 establishes that New River has an obligation to incur a \$130,000 expense for tank painting to be
 23 commenced in the next few months.⁴¹ The evidence also establishes that this is a reasonable level of

24 ³⁹ Official notice is taken of Decision No. 73145 (May 1, 2012).

25 ⁴⁰ Additionally, we note that Decision No. 73145 included as a finding of fact that “[n]one of the positions taken in
 the Agreement by any of the Parties may be referred to, cited, or relied upon as precedent.” Decision No. 73145 at 22
 (quoting Settlement Agreement at § 6.1(d)).

26 ⁴¹ *See, e.g., K-Line Builders, Inc. v. First Federal Savings & Loan Assoc.*, 139 Ariz. 209, 677 P.2d 1317 (Ariz. Ct. App.
 1983), of which official notice is taken. In *K-Line Builders*, the Court of Appeals stated the following concerning
 27 formation of an oral contract:

28 For an enforceable contract to exist, there must be an offer, an acceptance,
 consideration, and sufficient specification of terms so that obligations involved can be

1 expense for the work to be completed, that New River's tanks need to be recoated, and that a 15-year
 2 period between recoatings for water tanks is reasonable. Based upon the evidence herein, we find
 3 that it is just and reasonable to allow New River recovery of the \$130,000 in tank recoating expense
 4 for the work to be completed by ACAI, with the \$130,000 to be normalized over 15 years, which
 5 amounts to a pro forma expense increase of \$8,667 for the adjusted TY. We will require New River
 6 to ensure that the tank recoating work is completed in accordance with its testimony herein and to
 7 file, as a compliance item in this docket, no later than June 2, 2014, documentation from ACAI
 8 confirming completion of the quoted tank recoating work.

9 3. Rent, Buildings

10 New River and Staff have not reached agreement on the annual rent that should be allowed
 11 for three separate properties owned by Cody Farms and rented by New River: an office building, the
 12 87th Avenue Booster Plant property ("87th Ave. property"), and a portion of a workshop facility. In
 13 its application, New River included no rent for these properties, instead including \$75,000 in TY
 14 "management fees" paid to Cody Farms. (Jones Dir. at Sched. C-1.) New River subsequently
 15 clarified that Cody Farms provides no management services to New River and that Cody Farms
 16 merely charges New River rent for the use of Cody Farms' properties, with the Fletchers collecting
 17 that rent. (Tr. at 126-27.) According to Mr. Jones's testimony, in preparation for the TY, and based
 18 on advice received from legal counsel, Mr. Fletcher prepared a handwritten schedule establishing the
 19 amounts New River should pay Cody Farms for the use of Cody Farms' properties, which totaled
 20 \$75,000. (Tr. at 145-46.) Mr. Fletcher used this breakdown to respond to data requests from Staff.
 21 (*Id.*) New River did not provide any evidence of written lease agreements related to New River's use
 22 of Cody Farms' properties, and Mr. Jones indicated that the deals between Cody Farms and New
 23 River are not written. (*See, e.g.,* Tr. at 151.)

24 New River has asserted that it should be permitted to recover TY rent expense of \$48,600 for

25 ascertained. . . . The offer creates a power of acceptance permitting the offeree by
 26 accepting the offer to transform the offer as promised into a contractual obligation. . . .

27 An acceptance is "... a manifestation of assent to the terms thereof made by the
 offeree in a manner invited or required by the offer."

28 . . . A promise for a promise is adequate consideration.

139 Ariz. at 212, 677 P.2d at 1320 (citations omitted).